

Pumps | Sampling | Plastic Labware
for Laboratory, Industry, Science



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Pumps

Pumps, stop cocks, dosing machines

Fill off liquids – but do it safely

Safety is the top priority

Dangerous liquids must never be filled off by directly pouring them out. Even the use of a funnel does not provide the required degree of safety when bottling dangerous liquids.

- ▶ Increased accident risk by slipping on dirty floors.
- ▶ Skin diseases or poisoning by spilt chemicals.
- ▶ Health hazard from harmful vapours.

Safety during bottling must be the number one priority – for your own personal protection!



This means that purchasing a suitable pump for filling off hazardous liquids is an investment in the safety and health of your employees which pays for itself in a very short time.

Choosing the right pump

Apart from the size and type of the container, the required pump capacity and the suitability of the pump for the particular medium are important considerations for choosing the right pump. The pump does not only have to be resistant to the medium to be bottled, but specific occupational safety and environmental protection regulations must also be considered.

Pump capacity

Electric pumps are the first choice for filling off large quantities at a fixed location. Their higher pumping capacity saves times and requires less manual effort. However, the purchase of an expensive electric barrel pump does not always pay for itself; there is often no on-site mains supply, e.g. in the open air, during assembly or in the equipment storage facility. Manual pumps are an interesting alternative to electric pumps for filling off small quantities due to their independence from a power supply and because they mean value for money. Bürkle offers a wide range of pumping devices for manually removing liquids from containers, canisters, drums and tanks.

Container size and container type

Pumps that work according to the excess pressure principle are suitable for filling off the required quantities from canisters and small drums up to a capacity of approx. 60 litres. Air is pumped into the container using a pumping ball or pumping piston. This creates excess pressure in the container and the liquid is transported out via the immersion tube.

Barrel pumps are suitable for larger barrels and open containers. They draw in the liquid and then eject it. This family of pumps is characterised by their robust construction with a good pumping capacity and simple handling. Different immersion tube lengths mean



ination with an adapter. On the other hand, universal solutions such as conical drum stoppers can be used.

Materials

The most suitable pumps are robust industrial pumps made from top-quality materials such as polypropylene (PP) for acids and alkalis, or stainless steel V2A (1.4301) for flammable liquids. We always recommend the use of PTFE seals. Always check that the material is resistant to the medium to be pumped.

In many cases, a check against the chemical resistance list will help.

Caution with filling aids

Plastic siphons are a cost-effective alternative to mechanical pumps. Siphons are easy-to-use devices for safely filling off liquids from a higher container into a lower one. However, using them for aggressive or flammable liquids cannot be recommended. The pump bellows could be affected by acids and become brittle.



that the pumps fit all the usual commercially available containers. Low-mounted suction valves ensure that almost all the residual liquid is removed.

Container connections

In contrast to metal drums, which usually have an R2" fine thread, there are no standard connection threads for plastic drums. There are basically two different ways of attaching the pump to the drum or container. On the one hand, the pump can be screwed onto the existing container thread using a barrel screw joint, possibly in com-



Acids and alkalis

Acids, alkalis and detergents can be safely handled by plastic pumps made of PP or PVDF. Bürkle offers many plastic pumps with both rigid discharge pipes and also with discharge tubing and shut-off valve for filling containers which are further away or higher up. When handling corrosive or aggressive liquids, the user must take appropriate precautions. Protective clothing such as gloves, goggles, aprons and face masks is essential.

Flammable liquids

Filling off flammable liquids requires special precautionary measures. It is essential that filling devices for flammable liquids are made of conductive materials. It is essential that any electrostatic charges formed are eliminated completely and without forming sparks. Stainless steel barrel pumps meet these requirements when the electrostatic charges are eliminated by using the Antistatic Set.

Gas-tight bottling

With volatile media, such as acetone or ammonia, hazardous vapours are formed in the container. Their evaporation into the working environment and the risk to the user can be reduced by using a gas-tight barrel connector. With particularly toxic, noxious and readily volatile media, a closed filling system with a gas-shuttle pipe is essential. In this method, the gases displaced from the container are returned directly into the original container. The harmful gases remain in the system; the greatest possible degree of safety during filling off is guaranteed.

Foodstuffs

If foodstuffs are to be filled off, then it must be ensured that the materials used are physiologically harmless. Materials such as stainless steel, polypropylene or PTFE, which also have a neutral taste and odour, can be recommended. Furthermore, the pump must be easy to clean.

Any questions?

We will be happy to advise you. Talk to us - telephone +49 7635 82795-0. Or send an email to info@buerkle.de.

Overview of pumps

	Page	Liquids	Pastes	Gases	Acids and caustic solutions	Acids and caustic solutions, weak	Mineral oils, Diesel etc.	Petrochemicals	Pharmaceuticals/cosmetics	Solvents, not flammable	Solvents, flammable	Flammable liquids	Foodstuffs	Water	Dosing pumps	Gastight decanting	Bottles up to 2 liters	Canisters up to 20 liters	Laboratory barrels 10/25 liters	Containers up to 60 liters	Barrels up to 220 liters	Open container/tanks	Conveying capacity l/min	Conveying capacity l / stroke
OTAL® liquid transfer pumps	8	x			x	x		x	x	x			x	x			x	x	x	x			4	
OTAL® mini pump	11	x			x	x		x	x				x	x			x	x	x				4	
OTAL® battery pump	11,13	x				x								x				x	x				5	
Pump-it® container pump	14	x				x		x						x				x	x	x			12-26	
PumpMaster for chemical liquids	15	x			x	x			x					x				x	x	x			8	
PumpMaster for petrochemical liquids	15	x					x	x	x					x				x	x	x			8	
PumpMaster container and barrel pump	15	x							x					x				x	x	x			8	
Dosi-Pump	16	x				x			x				x	x	x		x	x	x					4-250
Barrel pump Ultrapure in PTFE	17	x			x	x		x	x					x				x	x	x	x	x		300-400
Barrel pump in PP	18	x			x	x			x				x	x				x	x	x	x	x	12	200-300
Stainless steel barrel pump	20	x					x	x	x		x	x	x	x				x	x	x	x			9-22
Solvent pump Mini	22	x					x	x	x		x	x	x	x		x	x							1,8
Solvent pump foot operated	24	x					x	x	x		x	x	x	x		x			x	x	x			30
Solvent pump hand operated	25	x					x	x	x		x	x	x	x		x		x	x	x				10
Anti-statics set	26										x	x												
Gas-tight barrel pump in stainless steel	30	x					x	x			x	x		x		x		x	x	x	x			350-560
Gas-tight barrel pump in PP	30	x			x	x								x		x		x	x	x				200
Rotary piston pump	31	x					x	x		x		x		x						x	x			30-40
Hand operated lever pump	31	x						x			x			x							x			25
Lever pump	32	x				x	x	x						x						x	x			15
Compact lever pump	32	x				x								x						x	x			300
Piston pump	32	x				x	x	x						x						x	x			450
Barrel pumps AccuOne and EnergyOne	33	x			x	x			x					x				x	x	x	x	x		0,4-12
Laboratory pump mains operated	36	x			x	x			x					x						x	x	x		40-65
Electric barrel pump petro	37	x					x	x				x									x	x		40
Drum pump for concentrated acids and alkalis	38	x			x	x			x					x							x	x		80
Drum pump for slight acids and alkalis	38	x				x			x					x							x	x		85
Drum pump for mineral oils	39	x					x	x				x		x							x	x		85
Double-diaphragm pump	40	x			x	x		x						x										16
Magnetic centrifugal pump	41	x			x	x								x										12-24
Membrane vacuum pump	41	x		x																				16
Siphon	42	x				x		x					x	x				x	x	x	x	x		9
Stop-cocks and ball valves	44	x			x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x		
Barrel valve	52	x																			x			
LiquoFill	52	x						x	x				x	x	x			x	x	x	x	x		8-500
PastoFill	55		x						x				x		x									10-260
Wall mounted dosing machine	56	x					x	x	x	x				x	x			x	x	x	x	x		100-500

Attention! Make sure to pay attention to the "List of Chemical Resistance"! Errors and omissions excepted.



OTAL® liquid transfer pumps | filling off liquids quickly, safely and cleanly

The OTAL® pump program has been on the market for 60 years. The pumps are popular and appreciated thanks to their easy handling in daily use.

Thanks to the simple stopper system, OTAL® pumps can be used for all common containers. The OTAL® Mini allows even very small containers to be filled.

Only the tube comes into contact with the liquid when OTAL® pumps are used, so that a great deal of liquid can be filled off using the tube materials PP, PVDF and stainless steel V2A. The different tube diameters make individual adjustments to required transfer volumes possible.

The OTAL® foot pump has another great advantage, particularly when filling aggressive media. It is designed so that both hands are free during the pumping process.

- ▶ Optionally available as a foot or hand pump
- ▶ Universal bungs for container openings of 30 – 70 mm diameter
- ▶ Tubes made of PP, PVDF or stainless steel V2A for different liquids



The bung has to fit!

Filling with the proven OTAL® pumps is particularly easy as the liquid is forced out of the container by the excess air pressure. The liquid flow is steady, without pulsating. However, it is important that the connection between the pump and the container is airtight. This is ensured by the universal bung made of soft PVC.

The universal bung consists of 3 parts, a conical centre (1) and 2 conical sleeves (2 and 3) which can be moved up and down the conical centre. This means that it is possible to obtain an airtight seal between OTAL® pumps and container openings with a diameter of 30 to 70 mm.



⚠ Instructions for use and safety information must be complied with. Protective clothing must be worn. See pages 58 - 61.

OTAL® hand pumps | to fit most commercial storage drums

The telescopic immersion tube adapts itself to the container height on insertion. This ensures good removal of residual liquid and means that the hand pump can be used with different containers.

- ▶ Particularly compact, space-saving hand pump
- ▶ Good pump capacity
- ▶ With universal bungs made of soft PVC, for container openings of 30 - 70 mm Ø

⚠ Attention! Make sure to pay attention to the "List of Chemical Resistance"!



OTAL® hand pumps | to fit most commercial storage drums



① OTAL® hand pump made of PP

OTAL® hand pumps with PP delivery tubes, resistant to weak acids, alkalis and detergents.

② OTAL® hand pump made of PVDF

OTAL® hand pump with PVDF delivery tubes, particularly suitable for acids and alkalis, not for heavily oxidising acids and alkalis. With its special material properties, PVDF has an even better chemical resistance than PP. Resistant to chlorine bleach.

③ OTAL® hand pump made of stainless steel

OTAL® hand pump with delivery tubes made of stainless steel (1.4301) for liquids that are not easily combustible in Hazard Category AIII (VbF). The OTAL® PP or PVDF hand pump should be used for caustic media.

④ OTAL® hand pump with hose and stopcock

OTAL® hand pump with hose and tap with discharge hose with a length of 1.5 m made of PVC and PP/PE stopcock, delivery tube made of PP. The discharge hose is particularly suited to fill distant containers.

⑤ OTAL® mini pump made of PP

OTAL® PP mini pump with delivery tubes made of PP and universal bungs made of soft PVC.

- ▶ For small containers, ideal for containers up to 10 litres
- ▶ With universal bungs for container openings of 20 - 36 mm Ø

⑥ OTAL® battery-pump

OTAL® pump for safe filling of car batteries with acid or distilled water.

- ▶ With hose shutoff valve
- ▶ With dosing tip for precise filling

OTAL® hand pump									
	Pump capacity approx. l/min	Tube Ø mm	Delivery tube material	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
①	14	12	PP	70		10		5005-1200	N4
①	20	15	PP	70		10		5005-1500	N4
①	26	18	PP	70		10		5005-1800	N4
②	20	16	PVDF	70		10		5005-3000	N4


OTAL® hand pump									
	Pump capacity approx. l/min	Tube Ø mm	Delivery tube material	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
③	26	18	V2A	90		10		5005-4000	N4
④	12	12	PP/PVC	70		10		5005-6000	N4
⑤	4	10	PP	45		10		5005-1000	N4
⑥	5	12	PP/PVC	70		10		5005-7000	N4

OTAL® foot pumps | high performance, sturdy, for industrial use



The telescopic immersion tube adapts itself to the container height on insertion of the foot pump. This ensures good removal of residual liquid and means that the foot pump can be used with different containers.

- ▶ Simple handling: Both hands remain free for filling
- ▶ Very good pump capacity due to large volume foot bellows
- ▶ With universal bungs made of soft PVC, for container openings of 30 - 70 mm Ø

 Attention! Make sure to pay attention to the "List of Chemical Resistance"!

OTAL® foot pumps | high performance, sturdy, for industrial use



① OTAL® foot pump made of PP

OTAL® foot pumps with delivery tubes made of PP, resistant to weak acids, alkalis and detergents.

② OTAL® foot pump made of PVDF

OTAL® foot pump with delivery tubes made of PVDF, particularly for acids and alkalis, not for heavily oxidising acids and alkalis. Resistant to chlorine bleach. With its special material properties, PVDF has an even better chemical resistance than PP.

③ OTAL® foot pump made of stainless steel

OTAL® foot pump made of stainless steel (1.4301), with delivery tubes made of stainless steel for liquids that are not easily combustible in Hazard Category AIII (VbF).

④ OTAL® foot pump with hose and stopcock

OTAL® foot pump with hose and tap with delivery tubes made of PP and a 1.5 m discharge hose made of PVC with stopcock made of PP/PE Ø 10 mm.

⑤ OTAL® battery-pump

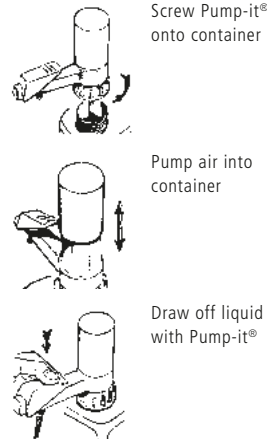
OTAL® pump for safe filling of car batteries with acid or distilled water.

① OTAL® foot pump made of PP

Pump capacity approx. l/min	Tube Ø mm	Delivery tube material	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.
20	15	PP	70		10		5000-1500 N4
26	18	PP	70		10		5000-1800 N4
30	22	PP	90		10		5000-2200 N4

	Pump capacity approx. l/min	Tube Ø mm	Delivery tube material	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.
②	20	16	PVDF	70		10		5000-4016 N4
③	26	18	V2A	90		10		5000-5018 N4
④	12	12	PP/PVC	70		10		5000-3012 N4
⑤	5	12	PP/PVC	70		10		5000-6000 N4

Pump-it® container pump



Pump-it® canister pumps are designed for quickly and cleanly emptying canisters and small barrels up to 60 l. The hand pump is used to create excess pressure that forces the liquid out of the canister. Pump-it® is suitable for weak acids, alkalis and petrochemicals.

- ▶ Medium-contacting parts made of PP, PE and FKM
- ▶ Pump threads suitable for container threads 64 mm Ø (BSI)
- ▶ Exact dosing, no drips
- ▶ Container completely emptied, thanks to stepless length adjustment of immersion tube

⚠ Not suitable for hydrochloric acid! Make sure to pay attention to the "List of Chemical Resistance"!

Pump-it® container pump

Material	Immersion depth cm	Pump capacity approx. l/min	Price €	Quantity scale from	Scale price €	Item no.
PP/FKM	100	8		10		5201-1000 N4



Accessories

Description	Price €	Item no.
Adapter set Pump-it® consisting of: 0600-3002, -3003, -3004, -1014, -1016		5201-0030 N4
Thread adapters PP outer/outer 2" coarse thread Mauser - 64 mm (BSI)		0600-3004 N4
Thread adapters PP outer/outer 2" coarse thread Tri-Sure - 64 mm (BSI)		0600-3002 N4
Thread adapters PP outer/outer 2" BSP - 64 mm (BSI)		0600-3003 N4
Thread adapters PP outer/inner 64 mm (BSI) - DIN 60		0600-1014 N4
Thread adapters PP outer/inner 64 mm (BSI) - DIN 51		0600-1016 N4
Thread adapters PP outer/inner 64 mm (BSI) - DIN 61		0600-1013 N4
Thread adapters PP outer/inner 64 mm (BSI) - DIN 71		0600-1001 N4

For more adapters, see page 28

Adapter set Pump-it®



Thread adapter set for Pump-it® canister pump consisting of:

- ▶ Adapter outer/outer, 2" coarse Mauser - 64 mm (BSI), green
- ▶ Adapter outer/outer, 2" coarse TriSure - 64 mm (BSI), brown
- ▶ Adapter outer/outer, 2" BSP - 64 mm (BSI), blue
- ▶ Adapter outer/inner, 64 mm (BSI) - DIN 60, black
- ▶ Adapter outer/inner, 64 mm (BSI) - DIN 51, black

Adapter set Pump-it®

Price €	Quantity scale from	Scale price €	Item no.
	10		5201-0030 N4

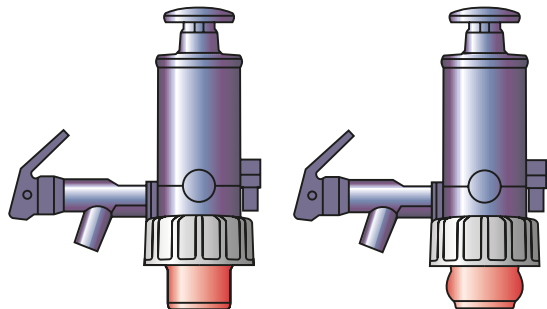
See page 28

PumpMaster container pumps | flexible, for universal use

The manual pressure pump is ideally suited for drawing off, decanting and emptying canisters and barrels. The hand pump is used to create excess pressure that forces the liquid out of the container. The stopcock also allows extraction of small quantities of liquid. The PumpMaster container pump is mounted on the container using a flexible stopper with a variable and adjustable diameter. No special thread adapters are required. PumpMaster fits all commercial container openings with a diameter from 49.5 mm to 60 mm. The immersion tube has a length of 95 cm and it can be shortened depending on the size of the container.

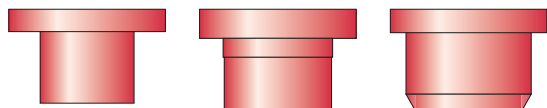
► Complete with three bungs in different sizes

⚠ Make sure to pay attention to the "List of Chemical Resistance"!



PumpMaster canister barrel pump stopper released

PumpMaster canister barrel pump stopper expanded



Various stoppers for PumpMaster

PumpMaster container pump for petrochemical liquids									⚠
Gaskets	Material	Colour	Pump capacity approx. l/min	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
nitrile rubber	PP/PE	blue grey	8	95		10		5202-3000	N4
Accessories									
Description							Price €	Item no.	
Discharge hose with shut-off valve for PumpMaster for petrochemical liquids								5202-3001	N4
PumpMaster container pump for non-aggressive liquids									⚠
Gaskets	Material	Colour	Pump capacity approx. l/min	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
EPDM	PP/PE	red	8	95		10		5202-2000	N4
Accessories									
Description							Price €	Item no.	
Discharge hose with shut-off valve for PumpMaster for aqueous liquids								5202-2001	N4
PumpMaster for acids and chemical liquids									⚠
Gaskets	Material	Colour	Pump capacity approx. l/min	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
FKM	PP/PE	green	8	95		10		5202-1000	N4
Accessories									
Description							Price €	Item no.	
Discharge hose with shut-off valve for PumpMaster for acids and chemical liquids								5202-1001	N4

Dosing pumps Dosi-Pump



Dosi-Pump 4 ml
Standard dosage approx.
4 ml per stroke.



Dosi-Pump 30 ml
Standard dosage approx.
30 ml per stroke.



**Dosi-Pump 30 ml,
fixed feeding tube**
Standard dosage approx.
30 ml per stroke, the
pump has a fixed feeding
tube.



**Dosi-Pump 100 ml,
fixed feeding tube**
Standard dosage approx.
100 ml per stroke, the
pump has a fixed feeding
tube.



**Dosi-Pump 250 ml,
fixed feeding tube**
Standard dosage approx.
250 ml per stroke, the
pump has a fixed feeding
tube.

Dosing pumps suitable for barrels, canisters, carboys or bottles, for dosing liquids of different viscosities. Dosing pumps are mounted by you in your existing container closure (see the locating bore table). To do this, a suitable hole is drilled in the cap. Then the pump is inserted through the hole and screwed in place from below.

A matching container connection is not included in the scope of delivery.

- ▶ Medium-contacting parts made of PP, PE and stainless steel

Dosing pumps Dosi-Pump



	Stroke approx. ml	Drill-hole dia. mm	Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.
①	4	21	20		100		5607-1004 N3
②	30	28,5	28		100		5607-2030 N3
③	30	22,5	35,5		100		5607-3030 N3
④	100	28,5	28		100		5607-4100 N3
⑤	250	28,5	28		100		5607-5250 N3



PTFE barrel pumps Ultrapure



Due to the high chemical resistance of the medium-contacting parts made of PTFE and FEP, even liquids which attack conventional materials such as PP or PVC can now be safely transferred (except for elemental fluorine) with this barrel pump. The barrel pump is also suitable for transferring ultra-pure liquids. The stopcock prevents hazardous vapours from escaping, and stops dripping after transfer.

Barrel pump with rigid discharge tube with stopcock made of PTFE.

Barrel pump with flexible discharge hose made of PTFE, length of 1.2 m and stopcock made of PVDF.

- ▶ Immersion tube Ø 32 mm
- ▶ All valves are made of solid PTFE/PVDF
- ▶ Top quality - 3 years' warranty
- ▶ Barrel screw joints for commercially available containers available as accessories

PTFE barrel pump Ultrapure - discharge tube



Immersion depth cm	Pump capacity ml/stroke	Price €	Quantity scale from	Scale price €	Item no.
60	270		10		5606-0600 N4
95	400		10		5606-1000 N4

PTFE barrel pump Ultrapure - discharge hose

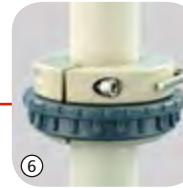


Immersion depth cm	Pump capacity ml per stroke	Price €	Quantity scale from	Scale price €	Item no.
60	270		10		5606-0601 N4
95	400		10		5606-1001 N4


Accessories

Description	Price €	Item no.
PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4
SafetyBox incl. safety goggles and protective gloves		2507-9000 N3

PP barrel pumps | robust industrial quality



Barrel pumps made of polypropylene allow a fast transfer of liquids from barrels, canisters and tanks. The good chemical resistance of PP allows acids, alkalis and aggressive detergents to be transferred. The low-mounted non-return valve of the barrel pump and the immersion depth that can be steplessly adjusted using the barrel screw joints ensure good removal of residual liquid. The barrel screw joint fastens the barrel's pump securely to the barrel. Barrel screw joints and thread adapters for commercially available containers are available as optional accessories.

 Attention! Make sure to pay attention to the "List of Chemical Resistance"!

PP barrel pumps | robust industrial quality



PP barrel pump - discharge tube

PP barrel pump with rigid discharge tube.

PP barrel pump - discharge hose/stopcock

PP barrel pump with flexible discharge hose made of PVC, length of 1.2 m and stopcock.

- ▶ Seals made of PTFE
- ▶ Immersion tube Ø 32 mm
- ▶ Capacity up to approx. 12l/min
- ▶ For barrels and tanks of 60 - 1000 litres

① PP barrel pump - discharge tube

Immersion depth cm	Pump capacity ml per stroke	Total length cm	Price €	Quantity scale from	Scale price €	Item no.
50	200	60		5		5600-0501 N4
65	230	74		5		5600-0651 N4
80	260	90		5		5600-0801 N4
100	300	109		5		5600-1001 N4
125	300	134		5		5600-1251 N4
150	300	159		5		5600-1501 N4

② PP barrel pump - discharge hose/stopcock

Immersion depth cm	Pump capacity ml per stroke	Total length cm	Price €	Quantity scale from	Scale price €	Item no.
50	200	60		5		5600-0502 N4
65	230	74		5		5600-0652 N4
80	260	90		5		5600-0802 N4
100	300	109		5		5600-1002 N4
125	300	134		5		5600-1252 N4
150	300	159		5		5600-1502 N4

Accessories

Description	Price €	Item no.
③ PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
④ PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
⑤ PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4

Accessories

Description	Price €	Item no.
⑥ Container screw joint		5600-3140 N4
⑦ PVC barrel plug, dia. 40-70 mm (not for EX zone)		5600-3150 N4
Discharge hose 1.2 m PVC with stopcock for PP barrel pump		5600-0100 N4
Drain safety stand (see page 57)		5618-1000 N4

Stainless Steel Barrel Pump | for flammable liquids



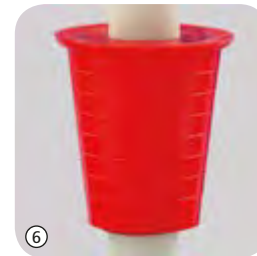
The Bürkle barrel pump made of stainless steel (1.4301) is suitable for filling combustible and easily flammable liquids. The barrel pump can conduct electricity and therefore fulfills the requirements for handling flammable liquids in combination with the accessory antistatic set.

The PTFE gaskets ensure long-term and maintenance-free use. Pumping capacity approx. 9 – 22 l/min, dependent on pump length.

The wide range of accessories makes it possible to adapt the pump to very different requirements.

Not suitable for acetone!

When withdrawing flammable liquids, the barrel and pump has to be grounded!
Use Anti-static set!



Stainless Steel Barrel Pump | for flammable liquids



Stainless steel barrel pump – discharge tube

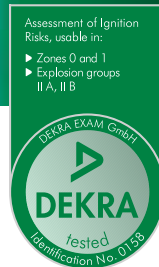
Barrel pump made of stainless steel with discharge tube.

- ▶ Removable discharge tube
- ▶ Immersion tube Ø 32 mm

Stainless steel barrel pump - discharge hose/stopcock

Barrel pump stainless steel with discharge hose and stopcock made of stainless steel and PTFE, can conduct electricity.

- ▶ Immersion tube Ø 32 mm
- ▶ Removable hose, 1.2 m in length
- ▶ Ball valve made of stainless steel NW 8 mm
- ▶ Discharge nozzle Ø 12.8 mm



① Stainless steel barrel pump - discharge tube

Immersion depth cm	Total length cm	Pump capacity ml per stroke	Price €	Quantity scale from	Scale price €	Item no.
36	48	220		5		5601-0400 N4
57	69	350		5		5601-0500 N4
91	103	560		5		5601-0800 N4

② Stainless steel barrel pump - discharge hose/stopcock

Immersion depth cm	Total length cm	Pump capacity ml per stroke	Price €	Quantity scale from	Scale price €	Item no.
36	48	220		5		5601-0401 N4
57	69	350		5		5601-0501 N4
91	103	560		5		5601-0801 N4

Accessories

Description	Price €	Item no.
③ Anti-static set		5602-1000 N4
④ Brass barrel screw joint R2" steel fine outer thread		5601-0100 N4

Accessories

Description	Price €	Item no.
⑤ Gastight barrel connector R2" steel fine outer thread		5601-0130 N4
Discharge hose 1.2 m with stainless steel/PTFE stopcock for stainless steel barrel pump		5601-0090 N4
Discharge tube for stainless steel barrel pump		5601-0080 N4
⑥ PVC barrel plug, dia. 40-70 mm (not for EX zone)		5600-3150 N4
Drain safety stand (see page 57)		5618-1000 N4
PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4
Universal barrel spanner		5690-0090 N4
Casual style safety goggles		2502-2010 N3

Mini solvent pump | reliable filling of small quantities



The Mini solvent pump is a high-quality hand pump for small containers such as bottles, canisters and tanks up to about 10 litres. For reliable filling and dosing of solvents and readily flammable liquids.

Simple principle - highly effective

The hand pump works according to the excess pressure principle. An excess pressure is built up in the container with the pump ball, forcing the liquid outward. In this way only the hose, pumping tube and discharge come in contact with the liquid being filled.

To ensure safety, a pressure relief valve protects the solvent pump against excessive pressure build-up, for example due to sunshine.

High-quality materials

All parts of this hand pump in contact with medium are manufactured from high-quality and inert materials PTFE and stainless steel (1.4301, 1.4404), which feature excellent chemical resistance. The Mini solvent pump is therefore especially well suited for use with high-purity liquids and readily flammable media such as acetone, isopropanol, ethanol and methanol, etc.

Filling in hazardous zones

The grounding cable included with delivery can easily be connected to the solvent pump with a bunch plug, thus diverting electrostatic charges so that flammable media can be filled safely.

Flexible applications

The solvent pump allows for filling from a wide range of container sizes. The flexible PTFE hose that conveys liquid out of the container can be shortened to any length. This ensures ideal residual draining, even from bottles and canisters with a vaulted bottom.

The hand pump has a GL 45 standard connecting thread. With the appropriate thread adapters (accessories), however, it can easily be adapted to containers with thread sizes S 40, GL 38 or GL 32.

- ▶ Ideal for 1-5 l containers
- ▶ Connecting thread GL 45
- ▶ Parts in contact with medium made of PTFE and stainless steel (1.4301, 1.4404)
- ▶ PTFE hose (6x8 mm) 0.4 m
- ▶ Including grounding cable 2 m
- ▶ Adapter available as accessory for S 40, GL 38 and GL 32

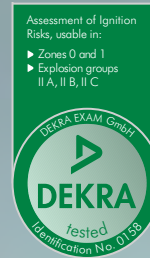
Mini solvent pump | reliable filling of small quantities

Precise removal of liquids

The self-closing discharge (with auto-stop function) of the Mini solvent pump ensures absolutely precise filling with no dripping at all. Dosing is even easy in very small containers such as test tubes, which present no problems. A hose can optionally be fastened onto the discharge spout (internal Ø 6 mm), thus making it possible to fill the container from a greater distance.

The Mini solvent pump is especially compact and very well balanced, which makes it possible to fill without tipping, even from very small containers.

Thanks to its sturdy design and high-quality materials, the Mini solvent pump consistently ensures neat and reliable filling throughout its long service life, easily and conveniently.



Mini solvent pump

Pump capacity approx. l/min	Connector thread	Price €	Item no.
1,8	GL 45		5603-4000 N4

Accessories

Description	Price €	Item no.
① Thread adapter for Mini solvent pump, PTFE, GL45-S40		0006-4000 N4
① Thread adapter for Mini solvent pump, ETFE, GL45-GL38		0006-4002 N4
① Thread adapter for Mini solvent pump, ETFE, GL45-GL32		0006-4003 N4
② Hose cutter		0006-9506 N3
Glass sampling bottle 1000 ml, GL 45		5314-0100 N3
Suction hose PTFE on roll 6 x 8 mm, roll with 5 m		8804-0608 N3

Solvent pump foot operated



EDELSTAHL®
Rost frei
STAINLESS STEEL



Solvent pump foot operated for filling of high purity liquids such as solvents.

All medium-contacting parts are made of stainless steel (1.4301) and PTFE. Due to the barrel screw joint and the stopcock, the container and the pump can be hermetically sealed. Unwanted vapours can therefore not escape during the filling process.

Massive, long-life industrial version. Clip connection for fast connection and disconnection of the air hose.

- ▶ Immersion tube can be steplessly adjusted to the barrel depth
- ▶ For barrels up to 220 litres
- ▶ Suitable for steel barrels with R 2" thread
- ▶ Thread adapter for commercially available containers and air filters for ultra-pure drawing-off available as accessory

! When withdrawing flammable liquids, the barrel and pump has to be grounded! Use Anti-static set!

Solvent pump foot operated - discharge hose/stopcock

Immersion depth cm	Connector thread	Pump capacity approx. l/min	Price €	Item no.				
95	2"	30		5603-3000 N4				

Solvent pump foot operated - discharge tube

Immersion depth cm	Connector thread	Pump capacity approx. l/min	Price €	Item no.				
95	2"	30		5603-1100 N4				

Accessories

Description	Price €	Item no.
Anti-static set		5602-1000 N4

Accessories

Description	Price €	Item no.
Air filters for solvent pump, filter class M5, 10 pieces		0006-6009 N4



Solvent pump hand operated



Hand-operated solvent pump for contamination-free removal of organic solvents and flavouring agents. For containers up to 60 l.
The pump is gas-tight and completely sealable with two ball valves.

- ▶ Medium-contacting parts made of stainless steel (1.4301) and PTFE
- ▶ Rigid discharge tube with stopcock made of stainless steel/PTFE
- ▶ Suitable for containers with R 2" thread
- ▶ Thread adapter for commercially available containers available as accessory

! When withdrawing flammable liquids, the barrel and pump has to be grounded! Use Anti-static set!



Solvent pump for tin-foil canisters fits on pull-out spouts



Anti-static set



Solvent pump hand operated

Immersion depth cm	Connector thread	Pump capacity approx. l/min	Price €	Item no.			
60	2"	10		5603-1000	N4		

Solvent pump hand operated, for tin-foil canisters

Immersion depth cm	Connector thread	Pump capacity approx. l/min	Price €	Item no.			
60	For pull-out spout	10		5603-2000	N4		

Accessories

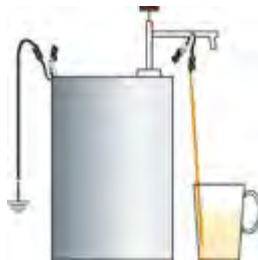
Description	Price €	Item no.
Anti-static set		5602-1000 N4

Anti-static set | prevents electrostatic build-up

Conductive containers are connected with the red cable, the black cable makes the earth connection (water pipe, etc.)



Safety Plus: The bare copper wire ensures earthing when pouring into non-conductive containers



When decanting flammable liquids without the machines and containers involved in the process being sufficiently earthed, electrostatic build-up can occur, which for many substances can result in fire or an explosion. Bürkle's anti-static set ensures easy and reliable earthing. The anti-static set consists of three colour-coded connecting copper cables with clamps in a handy plastic case.



Anti-static set

Price €

Quantity scale from

Scale price €

Item no.

5

5602-1000 N4



Barrel screw joints



Barrel screw joint made of nickel-plated brass for barrel pump stainless steel. Prevents electro-static charge in combination with the anti-static set. For the safe transfer of flammable and easily flammable liquids. For containers with R2" steel fine thread inside.



The gas tight barrel screw joint prevents hazardous gases from escaping from the barrel. R2" steel barrel thread, non-return valve with connection 1/8". Nickel-plated brass, seals made of FKM.



Barrel screw joint made of PP for secure connection in the barrel in three different thread models. For drawing off liquids that are not flammable.



Container screw joint to fasten the barrel pump in any location on the side of the container. Also for wide-necked screw caps. The screw joint 2" is screwed on from the inside using lock nut 2". (Mounting holes in the container 60 mm).



Barrel bungs made of PVC, consisting of two parts, therefore can be used for various openings with a diameter from 40-70 mm.

Brass barrel screw joint

Thread	Price €	Quantity scale from	Scale price €	Item no.
R2" steel fine outer thread		5		5601-0100 N4

Gastight barrel connector

Thread	Price €	Quantity scale from	Scale price €	Item no.
R2" steel fine outer thread		5		5601-0130 N4

PP barrel screw joint

Thread	Price €	Quantity scale from	Scale price €	Item no.
R 2", steel fine outer thread		5		5600-3130 N4
Mauser 2", coarse outer thread		5		5600-3170 N4
Tri-Sure, coarse outer thread		5		5600-3180 N4

Container screw joint

Opening dia. mm	Price €	Quantity scale from	Scale price €	Item no.
60		5		5600-3140 N4

PVC barrel plug

Opening dia. mm	Price €	Quantity scale from	Scale price €	Item no.
40-70		5		5600-3150 N4

Thread adapters PP



We offer a broad range of thread adapters. This facilitates the secure connection of many of our pumps and discharge cocks to a variety of containers.

You will always find the correct connection thanks to the combination of different adapters.

Do you have any questions about choosing the right thread adapter? Please call us. We are glad to offer assistance.

Instructions for determining the thread can be found on page 260.

	External thread	Internal thread	Colour	Price €	Quantity scale from	Scale price €	Item no.
①	Tri-Sure	2" BSP	orange		10		0600-1006 N4
②	Mauser	2" BSP	blue		10		0600-1010 N4
③	Tri-Sure	Mauser	red		10		0600-1011 N4
④	Mauser	Tri-Sure	purple		10		0600-1012 N4
⑤	US drum thread	2" BSP	silver		10		0600-1007 N4
⑥	61 mm	2" BSP	gray		10		0600-1008 N4
⑦	61 mm	3" coarse	natural		10		0600-1009 N4
⑧	64 mm (BSI)	DIN 60	black		10		0600-1014 N4
⑨	64 mm (BSI)	DIN 51	black		10		0600-1016 N4
⑩	64 mm (BSI)	DIN 61	yellow/blue		10		0600-1013 N4
⑪	64 mm (BSI)	DIN 71	brown/blue		10		0600-1001 N4
	Internal thread		Colour	Price €	Quantity scale from	Scale price €	Item no.
⑫	35 mm - 2" BSP		black		10		0600-2004 N4
⑬	51 mm - 2" BSP		green		10		0600-2005 N4
⑭	DIN 61 - 2" BSP		yellow		10		0600-2001 N4
⑮	64 mm - 2" BSP		white		10		0600-2006 N4
⑯	DIN 71 - 2" BSP		brown		10		0600-1003 N4
	External thread		Colour	Price €	Quantity scale from	Scale price €	Item no.
⑰	61 mm - Tri-Sure		black		10		0600-3006 N4
⑱	61 mm - 2" BSP		black		10		0600-3007 N4
⑲	2" coarse Mauser - 64 mm (BSI)		green		10		0600-3004 N4
⑳	2" coarse Tri-Sure - 64 mm (BSI)		brown		10		0600-3002 N4
㉑	2" BSP - 64 mm (BSI)		blue		10		0600-3003 N4
㉒	Adapter set, consisting of 1, 2, 14 and 16				5		0600-3010 N4

Thread adapter set LaboPlast



Adapter set consisting of:

- ▶ Thread adapter 3/4" - Hünersdorff
- ▶ Thread adapter 3/4" - Kautex
- ▶ Thread adapter 3/4" - cylindrical R 3/4" barrel thread
- ▶ Thread adapter 3/4" - conical R 3/4" barrel thread
- ▶ Hexagonal key for thread adapter



Thread adapters LaboPlast 3/4"

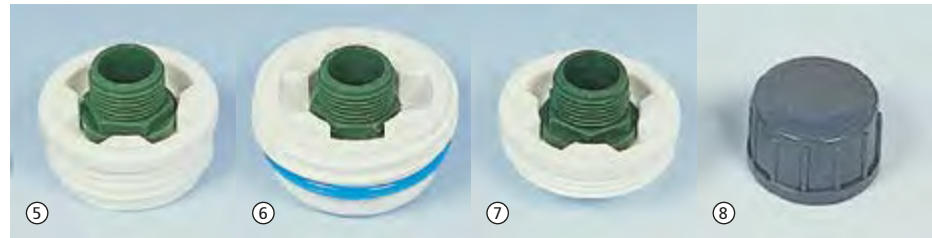


① Thread adapter 3/4" - Hünersdorff

② Thread adapter 3/4" - Kautex

③ Thread adapter 3/4" - cylindrical R 3/4" barrel thread

④ Thread adapter 3/4" - conical R 3/4" barrel thread



⑤ Thread adapter 3/4" - coarse thread, Tri-Sure 2"

⑥ Thread adapter 3/4" - coarse thread, Mauser 2"

⑦ Thread adapter 3/4" - fine thread 2"

⑧ Captive cap for 3/4"



StopCock spigots, ball valves and other accessories can be connected to most commercially available containers, with the LaboPlast thread adapters. All adapters have a standard outer thread R 3/4".

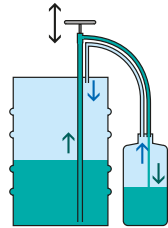
⑨ Hexagonal key for thread adapter

Thread adapter set LaboPlast

Price €	Quantity scale from	Scale price €	Item no.
	10		0600-0050 N4

	Thread, outflowing side	Thread, in-flowing side	Colour	Material	Price €	Quantity scale from	Scale price €	Item no.
①	Hünersdorff	3/4"	red	PP		10		0600-0010 N4
②	Kautex	3/4"	blue	PP		10		0600-0020 N4
③	cylindrical R 3/4" thread connection	3/4"	black	PP		10		0600-0150 N4
④	conical R 3/4" thread connection	3/4"	green	PP		10		0600-0030 N4
⑤	coarse thread, Tri-Sure 2"	3/4"	green/white	PP/PE		10		0600-0094 N4
⑥	coarse thread, Mauser 2"	3/4"	green/white	PP/PE		10		0600-0120 N4
⑦	fine thread 2"	3/4"	green/white	PP/PE		10		0600-0190 N4
⑧	Captive cap for 3/4"		gray	PVC		10		0600-0090 N4
⑨	Hexagonal key for thread adapter		blue	PP		10		0600-0001 N4

Gas-tight barrel pump PP | odor-free liquid transfer



Liquid is pumped in the closed system (green). Vapours are directed back through the gas displacement line (blue)

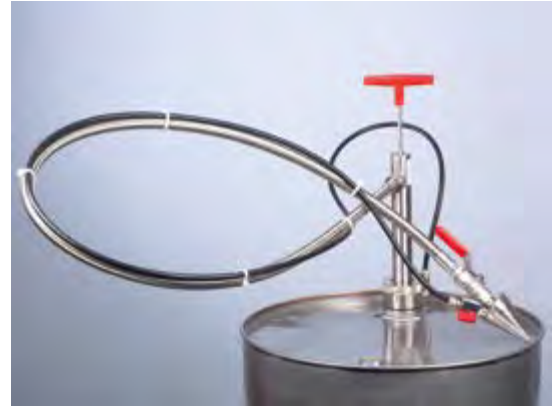
- ▶ Medium-contacting parts PP and PVC soft (hose)
- ▶ Steplessly extendable telescopic tube
- ▶ For barrel depths of 40 - 67 cm
- ▶ Two adapters for original containers

The gas-tight barrel pump enables odour-free transfer.

During transfer with normal pumps, it is impossible to prevent vapours escaping into the atmosphere. The gas-shuttle method avoids this. Any vapours produced are returned from the container which is to be filled to the original container via the gas-shuttle pipe. The gas pipe and the liquid pipe are additionally provided with stopcocks.

Gas-tight pumps are used for substances that have a strong smell such as ammonia.

Gas-tight stainless steel pump



Gas-tight barrel pump with flexible discharge hose for filling off into large canisters and containers. Convenient transfer because the canister can stay on the floor. The connection cone is held onto the container.

- ▶ Parts in contact with media: Stainless steel (1.4301), PTFE, nickel-plated brass, PA that can conduct electricity
- ▶ Incl. gas-tight barrel screw joints with 2" fine thread
- ▶ For bottle openings from 16 - 49 mm
- ▶ Immersion tube \varnothing 32 mm
- ▶ The pump can be hermetically sealed with two ball valves

Pump has been developed in cooperation with Ludwig-Maximilians University, Munich.

Gas-tight barrel pump PP

Model	Pump capacity ml per stroke	Price €	Item no.
① with universal adapter 30-70 mm \varnothing	200		5610-1030 N4
② with 2 screw joint adapters 3/4" with lock nuts	200		5610-1040 N4

Gas-tight stainless steel barrel pump - discharge hose/stopcock

Immersion depth cm	Total length cm	Pump capacity ml per stroke	Price €	Quantity scale from	Scale price €	Item no.
57	69	350		5		5611-1090 N4
91	103	560		5		5611-0090 N4

Lever pump aluminium



Lever pump for petrochemical substances made of stable aluminium cast, valves and pistons are made of plastic (PA).

- ▶ Suitable for barrel threads M 64 x 4 or R2"
- ▶ With closure device
- ▶ Immersion tube length 84 cm
- ▶ Supplied with hose kit, hose length 1.5 m, electrically conductive, with outlet elbow and bend protection spring

Lever pump aluminium

Pump capacity approx. l/min	Pumping height water column m	Connector thread	Price €	Item no.
25	1	M64x4, R2"		5627-1000 N2

Accessories

Description	Price €	Item no.
Anti-static set		5602-1000 N4

Rotary piston pumps



Rotary piston pump made of cast iron



Barrel screw joint rotary piston pump



Rotary piston pump made of V2A

Many uses: Between hose connections, as a barrel pump with a rigid outlet elbow or a flexible discharge hose. It can pump in both directions by rotating backwards and forwards.

- ▶ Viscosity up to max. 150 cst ISO/11.5° Engler/40 SAE at + 20°C
- ▶ Hose kit consisting of 1.5 m PVC hose, connection fittings and filler pipe available as accessories
- ▶ With two-part immersion tube length 100 cm

Rotary piston pump cast iron

Pump capacity approx. l/min	Connector thread	Pumping height water column m	Material	Price €	Item no.
① 30	3/4"	8	cast iron/bronze		5626-1030 N2
① 40	1"	7,5	cast iron/bronze		5626-1040 N2

Rotary piston pump stainless steel

Pump capacity approx. l/min	Connector thread	Pumping height water column m	Material	Price €	Item no.
② 40	1"	7	AISI 304/PTFE		5626-2040 N2

Accessories

Description	Price €	Item no.
③ Thread connection for rotary piston pump 3/4", 5626-1030		5626-0110 N2
④ Thread connection for rotary piston pump 1", 5626-1040 / -2040		5626-0121 N2
Angled thread connection for rotary piston pump 3/4", 5626-1030		5626-0132 N2
Angled thread connection for rotary piston pump 1", 5626-1040 / -2040		5626-0133 N2
Discharge hose for rotary piston pump 3/4", 5626-1030		5626-0031 N2
Discharge hose for rotary piston pump 1", 5626-1040 / -2040		5626-0030 N2
Discharge tube for rotary piston pump 3/4", 5626-1030		5626-0012 N2

Compact lever pump



Compact, self-priming polyethylene lever pump, suitable for alkaline liquids and many acids. The telescope suction tube for lever pump is steplessly extendable to 914 mm, which means it can be used for barrels from 60 to 200 l.

- ▶ Pump capacity is about 300 ml per stroke
- ▶ With integrated barrel screw connection for 2" BSP thread

Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Compact lever pump					
Immersion depth cm	Price €	Quantity scale from	Scale price €	Item no.	
91		10		5613-0020	N2

Lever pump



With the lever pump, required quantities can be taken from barrels without much effort. The pump is made of polypropylene. The discharge tube can be rotated around its own axis. This means that containers for filling off can also be placed on the barrel lid.

- ▶ Pump capacity 350 ml per stroke
- ▶ Viscosity of the media up to 2200 mPas (not suitable for oil)
- ▶ Screw joint 2" for steel barrel inner thread
- ▶ Immersion tube steplessly extendable up to 95 cm
- ▶ Fitting thread adapter is available as accessory

Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Lever pump				
Price €	Quantity scale from	Scale price €	Item no.	
	10		5613-0010	N2

Piston pump PP



The piston pump is made of polypropylene and polyethylene, for watery and petrochemical products. It represents value-for-money. The piston pump is attached to the container which is to be filled using a 2" - or 3/4" barrel thread. After mounting, the pump can still be rotated around its axis so that containers to be filled can be placed on the barrel lid.

- ▶ Pump capacity 300 ml per stroke
- ▶ For containers with R2" and 3/4" inner thread
- ▶ Immersion tube length 84 cm

Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Piston pump PP					
Price €	Quantity scale from	Scale price €	Item no.		
	10		5613-0030	N2	

AccuOne / EnergyOne | Flexible – reliable – convenient – with the hybrid system

The new approach to flexibility – One pump with maximum possibilities.

Bürkle barrel pumps **AccuOne** and **EnergyOne** with the unique hybrid system ensure fast, flexible and convenient filling whenever and wherever you want. The pumps are equipped with two different power supply systems:

AccuOne, driven by a high-performance rechargeable battery or **EnergyOne**, with a power cable for direct connection to the electrical network.

The innovative new feature: The power supply units are interchangeable!



One drive for several pump stations



AccuOne / EnergyOne | Flexible – reliable – convenient – with the hybrid system

The rechargeable battery or the power supply unit are fitted with a clip lock and are removable. They can be exchanged quickly and easily. Thus AccuOne can also be operated with the power supply cable unit and EnergyOne can be operated with the rechargeable battery. With a replacement rechargeable battery as an accessory, you never have to wait for charging.

The drive can also be disconnected quickly and easily from the pump station with a clip lock. **This makes it possible to use one drive for filling at several stationary pump stations.**

AccuOne and EnergyOne are designed for applications in which even very small amounts of liquid can be added to small containers with narrow openings. The TouchPanel features a foil keyboard sealed off against dust, dirt and water. The keyboard can be used to regulate the flow rate continuously and precisely from 0.4 l/min to 12 l/min.

In addition to the drainage elbow, a flexible drainage hose with nozzle is optionally available.

The light and powerful pumps are made of high-quality materials, PP, PTFE and Hastelloy C, to ensure outstanding chemical resistance. This also makes them suitable for dispensing acids and bases. Please make note of detailed information related to chemical resistance!

Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Do not use in EX area!

- ▶ Unique hybrid system – rechargeable battery and power supply unit are interchangeable
- ▶ Drive unit can be easily disconnected
- ▶ TouchPanel for precise dosing
- ▶ Excellent residual draining and pumping capacity
- ▶ One drive for several pump stations
- ▶ Outstanding chemical resistance



Battery can be easily disconnected



Power supply unit can be easily disconnected



Drive unit can be easily disconnected



Touchpanel



Power supply unit incl. connector



Charger for battery

AccuOne barrel pump



More accessories on page 36

The barrel pump driven by rechargeable battery, AccuOne, features a unique new hybrid system with complete flexibility and independence from the electrical network. A powerful light rechargeable battery with the latest next generation lithium-ion technology, without memory effect, with auto-stop function before deep discharge.

- ▶ Lithium-ion rechargeable battery – latest generation
- ▶ Up to 600 litres of delivery volume per battery charge, replacement back-up battery available
- ▶ Optionally available with rechargeable battery or power supply unit (available as accessory)
- ▶ Consisting of pump station, drive, rechargeable battery, charger and fixed discharge elbow

AccuOne barrel pump driven by rechargeable battery



Immersion depth cm	Price €	Item no.
50		5900-1050 N4
70		5900-1070 N4
100		5900-1100 N4

Accessories

Description	Price €	Item no.
PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4

EnergyOne barrel pump



More accessories on page 36

The barrel pump driven by power supply unit, EnergyOne, features a unique new hybrid system with complete flexibility and independence from battery charging.

- ▶ Power supply via 230 V power supply unit, international plug adapter included with delivery.
- ▶ Unlimited filling duration
- ▶ Optionally available with power supply unit or rechargeable battery (available as accessory)
- ▶ Consisting of pump station, drive, power supply unit incl. connector and fixed discharge elbow

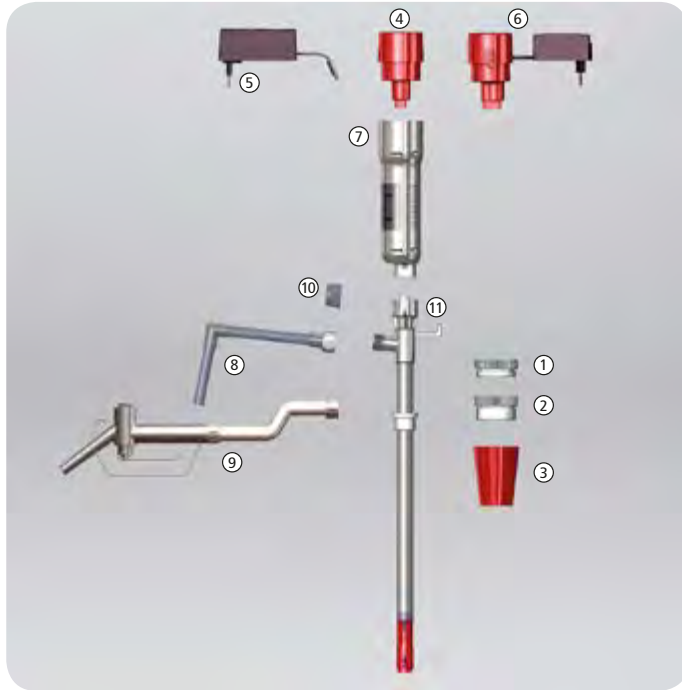
EnergyOne barrel pump driven by power supply unit



Immersion depth cm	Price €	Item no.
50		5900-2050 N4
70		5900-2070 N4
100		5900-2100 N4

Accessories

Description	Price €	Item no.
PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4



Light- and high-performance pump to transfer small quantities of watery media up to 300mPas from canisters, barrels and narrow-necked containers from 32 mm opening diameter.

- ▶ PP
- ▶ Splash-water protected motor 230 V/200 W (IP44)
- ▶ Built-in safety key as on/off switch
- ▶ Seal-less pump mechanism for acids and alkalis
- ▶ Thread connection 1" with hose connector 3/4"
- ▶ Incl. 1.5 m PVC hose 3/4", PP nozzle and wall bracket

⚠ Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Accessories

Description	Price €	Item no.
① PP barrel screw joint, R 2", steel fine outer thread		5600-3130 N4
① PP barrel screw joint, Mauser 2", coarse outer thread		5600-3170 N4
① PP barrel screw joint, Tri-Sure, coarse outer thread		5600-3180 N4
② Container screw joint		5600-3140 N4
③ PVC barrel plug, dia. 40-70 mm (not for EX zone)		5600-3150 N4
④ Rechargeable battery without charger for Accu/EnergyOne		5900-3010 N4
⑤ Charger for battery Accu/EnergyOne		5900-3015 N4
⑥ Power supply unit incl. connectors for Accu/EnergyOne		5900-3020 N4
⑦ Drive without rechargeable battery/power supply unit		5900-3030 N4
⑧ Discharge tube		5900-3040 N4
⑨ Discharge hose 1.2 m, with nozzle (PVC, PP, V2A, FKM)		5900-3045 N4
⑩ Closing cap thread 3/4"		8535-0034 N3
⑪ Pump station Accu/EnergyOne, submersible length 50 cm		5900-3050 N4
⑪ Pump station Accu/EnergyOne, submersible length 70 cm		5900-3070 N4
⑪ Pump station Accu/EnergyOne, submersible length 100 cm		5900-3100 N4

Laboratory pump mains operated

Immersion depth cm	Pump capacity approx. l/min	Pumping height water column m	Tube Ø mm	Price €	Item no.
70	75	7	32		5700-2200 N2
100	75	7	32		5700-4400 N2

Accessories

Description	Price €	Item no.
Flow meter PP 1" (see page 40)		5700-0111 N2

Electric barrel pump Petro | for Diesel oil, class D/II fuel oil



Electric barrel pump for pumping diesel oil, Category EL fuel oil, undiluted radiator antifreeze and other liquids of Hazard Category AIII (VbF). Built-in siphon protection prevents leaks if the tube is faulty. Available for 230 V. Available with either standard filling nozzle or filling nozzle with automatic shut-off. Electronic volume readout with cumulative total and suitable for calibration (supplied uncalibrated), available as accessory.

- ▶ With manual suction pump
- ▶ VDE tested, motor with thermal protection switch
- ▶ Barrel thread M 64 x 4 and 2"
- ▶ Suction hose with filter 1.60 m length
- ▶ Pump hose made of Perbunan, 4 m length, with bend protection spring and pump nozzle

Not suitable for aqueous/diluted liquids!



Petro flow counter

Electric barrel pump Petro

Model	Pump capacity approx. l/min	Price €	Item no.
standard	40		5780-0040 N2
automatic	40		5780-0041 N2

Accessories

Description	Price €	Item no.
Volume readout Petro		5780-0020 N2

Drum pump for acids and alkalis



Barrel pump for weaker acids, such as hydrochloric acid, phosphoric acid, chromic acid, battery acid, citric acid, etc.

- ▶ Motor 230 V
- ▶ Pump tube PP, shaft Hastelloy C
- ▶ Thread connection 1 1/4" with hose connector 3/4"
- ▶ 2 m PVC fabric hose 3/4"
- ▶ PP pump nozzle
- ▶ PP barrel screw joint
- ▶ Pump height 19 mWS, pump capacity 85 l/min

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Drum pump for acids and alkalis			
Immersion depth cm	Tube Ø mm	Price €	Item no.
100	41		5762-0100 N2
120	41		5762-0101 N2
Accessories			
Description	Price €	Item no.	
Flow meter PP 1 1/4" (see page 40)		5700-0121 N2	

Drum pump for concentrated acids/alkalis



Barrel pump for highly aggressive acids and alkalis, such as sulphuric acid, nitric acid, hydrofluoric acid, sodium hypochlorite etc.

- ▶ Motor 230 V
- ▶ PVDF pump tube
- ▶ Thread connection 1 1/4" with hose connector 3/4"
- ▶ 2 m special chemical hose 3/4"
- ▶ PVDF pump nozzle
- ▶ PP barrel screw joint
- ▶ Pump height 17 mWS, pump capacity 80 l/min

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Drum pump for concentrated acids/alkalis			
Immersion depth cm	Tube Ø mm	Price €	Item no.
100	41		5762-0200 N2
120	41		5762-0201 N2
Accessories			
Description	Price €	Item no.	
Flow meter PVDF 1 1/4" (see page 40)		5700-0141 N2	

Drum pump for mineral oils



Barrel pump for light viscous mineral oil products, such as diesel, fuel oil, hydraulic fluid, machinery and motor oil, etc.

- ▶ Motor 230 V
- ▶ Pump tube made of aluminium
- ▶ Hose connection Alu 1"
- ▶ 2 m PVC fabric hose 1"
- ▶ Hose clips 1"
- ▶ Alu pump nozzle, PP barrel screw joint
- ▶ Medium-contacting parts made of aluminium and V4A (1.4571)
- ▶ Delivery pump height 19 mWS, Pump capacity 85 l/min

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Drum pump for mineral oils

Immersion depth cm	Tube Ø mm	Price €	Item no.
100	41		5763-0100 N2



Drum pump for solvents



Barrel pump for highly flammable hydrocarbons such as ethanol, benzene, butanol, isopropanol, kerosene, methanol, etc.

- ▶ Motor 230 V
- ▶ Pump tube made of stainless steel
- ▶ Voltage balancing cable
- ▶ Hose electrically-conductive
- ▶ 2 m solvent hose 3/4"
- ▶ Brass pump nozzle
- ▶ PP barrel screw joint
- ▶ Delivery pump height 14 mWS, pump capacity 95 l/min

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Drum pump for solvents

Immersion depth cm	Tube Ø mm	Price €	Item no.
100	41		5763-0301 N2



Flow meters



Compact electronic flow counter for electrical barrel and container pumps. For thin fluid media.

- ▶ Measuring according to the turbine wheel principle
- ▶ Counter can be calibrated depending on the medium
- ▶ Different versions for many different applications
- ▶ Automatic switch-on when flow is recognised
- ▶ Measuring accuracy $\pm 1\%$, easy recalibration
- ▶ Long-life lithium battery
- ▶ For use up to max. 4 bar (20°C)
- ▶ Range of viscosity 0,8 - 40 mPas
- ▶ Temperature -10 °C up to +50 °C

Flow meter					
Material	Model	Measuring range l/min	Connector thread	Price €	Item no.
PP, Hastelloy C4, FKM	for fuel oil, diesel, hydrochloric acid, sod. hydroxide, etc.	5 – 90	G 1 1/4"		5700-0121 N2
PP, Hastelloy C4, FKM	for fuel oil, diesel, hydrochloric acid, sod. hydroxide, etc.	5 – 90	G 1"		5700-0111 N2
PVDF, Hastelloy C4, FKM	for highly aggressive liquids like chlorine bleaches, nitric acid, sulfuric acid, etc.	5 – 90	G 1 1/4"		5700-0141 N2

Oil-free double-diaphragm pump



Pneumatic double-diaphragm pump to pump viscous, corrosive, abrasive and flammable liquids. Pump model 1/4". The pump is available in the materials polypropylene, PVDF and nylon. The membranes, balls and valve seats are available in Geolast, PTFE and Santoprene. Solids up to 1.6 mm Ø can be transported.

- ▶ Max. pump capacity 16 l/min
- ▶ Suction height dry 6 m
- ▶ Self-priming
- ▶ Operating compressed air min. 1.4 bar, max. 6.8 bar
- ▶ Max. temperature 66°C
- ▶ Inlet side/outlet side 1/4" inner thread

Oil-free double-diaphragm pump			
Model	Material	Price €	Item no.
for water-based liquids, lubricants, mineral oil	housing PP, diaphragm. Geolast		5765-0001 N2
for corrosive liquids, inorganic acids and alkalis	housing PP, diaphragm. PTFE		5765-0002 N2
for water-based liquids, sodium hydroxide solution	housing PP, diaphragm. Santoprene		5765-0003 N2
for strong acids and alkalis, increased temperatures	housing PVDF, diaphragm. PTFE		5765-0004 N2

Magnetic centrifugal pumps



The magnetic centrifugal pumps are suitable for transferring acids, alkalis, alkaline and electroplating baths, photography chemicals as well radioactive, sterile and highly corrosive liquids. The drive, via contact-free magnetic force transfer, requires no dynamic shaft seals and this makes a hermetically sealed pump housing possible, which means that it cannot leak.

- ▶ Seal-less
- ▶ Surrounding temperature max. 45 °C
- ▶ Operating temperature max. 60 °C
- ▶ Viscosity max. 20 mPas

Magnetic centrifugal pump 15 Watts, motor 230 V, material PP (reinforced with fibre glass), stainless steel (shaft), Rulon (bearing), FKM (seal).

- ▶ Pump capacity 1 to 12 l/min, delivery height up to 2 m
- ▶ Without thread, hose nozzle 14 mm

Magnetic centrifugal pump 29 Watts, motor 230 V, material PP (fibre glass reinforced), stainless steel, Rulon (bearing), FKM (seal), ceramics (shaft).

- ▶ Pump capacity 1 to 24 l/min, delivery pump height up to 3 m
- ▶ Suction connection / pressure connection G 3/4" outer thread (BSP)

Magnetic centrifugal pump

Model	Price €	Item no.
① 15 Watt, no thread connection, with tubing nozzle		5766-0001 N2
② 29 Watt, with R 3/4" outer thread		5766-0002 N2



AirJet Mini vacuum pump/compressor



The AirJet Mini single-head membrane vacuum pump is suitable for a variety of applications in the laboratory and industry. The dry running membrane vacuum pump is able to pump, compact and evacuate 100% oil-free, which means it does not distort results or add impurities, and can also be used as a compressor.

The AirJet Mini is used to pump and evacuate air and neutral or slightly aggressive or corrosive gases and vapours.

- ▶ Weight 1.9 kg, dimensions LxWxH 164/90/141 mm
- ▶ Hose connection ID 4 mm
- ▶ Maintenance-free, environmentally friendly
- ▶ High level of gas tightness
- ▶ Very quiet with low vibrations

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!



① AirJet Mini membrane vacuum pump/compressor

Model	Pump capacity approx. l/min	Vacuum mbar	Pressure max. bar	Price €	Item no.
Membrane made of EPDM	6	100	2,4		5625-2000 N2
Membrane made of PTFE	5,5	160	2,5		5625-2001 N2

Accessories

Description	Price €	Item no.
② AirJet Mini fine regulation head		5625-2002 N2
③ AirJet Mini sound absorber		5625-2003 N2

Siphon with stopcock | for occasional drawing off of liquids



Device for easy operation to quickly fill off watery liquids from containers higher up to containers lower down.

Works according to the siphoning principle: Liquid needs only to be primed once, therefore especially handy for complete emptying of a container.

- ▶ LDPE/PVC
- ▶ Pump capacity 9l/min
- ▶ With robust ball valve made of PP
- ▶ Good view of medium due to transparent hoses
- ▶ Bend protection for the hose with suspension eyelet
- ▶ Cost-effective filling unit if drawing-off does not need to take place regularly

Offered also as rigid immersion tube upon request.

Siphon with stopcock

Material	Immer- sion depth cm	Hose inner dia. mm	Pump capacity approx. l/ min	Price €	Quan- tity scale from	Scale price €	Item no.
LDPE/ PVC/PP	100	15	9		10		5605-1000 N4



Viscosity of liquids

The right pump for each liquid

Pumps are used in widely different fields of application. Bürkle offers a large number of different versions. However, when choosing a suitable pump several criteria must be considered. The most important are the viscosity, structure and density of the liquid.

How the liquid behaves under the influence of external influences, e.g. variations in temperature and pressure, is also important.

We would be pleased to help you make certain that you choose the correct pump for your application.

Viscosity – what actually is viscosity?

The viscosity characterizes the flow behavior of a liquid. High-viscosity liquids are thick, low-viscosity liquids thin. This viscosity results from intermolecular forces; these are also known as the internal friction. This internal friction decreases as the temperature increases and increases as the temperature decreases.

The dynamic viscosity is given in Pas, for low-viscosity liquids in mPas. It is defined as the force in newtons that is necessary to displace a liquid layer of 1 m^2 and 1 m height along a boundary parallel to a second layer at a speed of $1 \text{ m}\cdot\text{s}^{-1}$.

Viscosity using motor oil as an example

Everyone has heard of the viscosity terms for motor oil. This classification is based on the flow behavior of the motor oil as a function of the temperature. In Winter low-viscosity oils are required. In Summer the oil becomes hotter, but it must still remain sufficiently thick.

For example: SAE 5W-40. The first number defines the viscosity at 0°F (-18°C), the second for a temperature of 210°F (99°C). An oil with the classification 5W (W=Winter) is therefore thinner than a 15W motor oil under cold conditions.



Typical viscosity values in mPas at 20°C

Kerosine	0,65	Coffee cream	~ 10	Hydraulic oil	~ 120
Water	1,0	Glycol	40	Motor oil 15W40	390
Grape juice	2 – 5	Olive oil	~ 100	Honey	~ 10 000

StopCocks | completely water-tight, easily operated

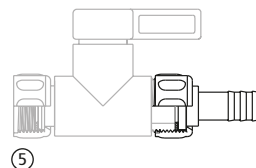
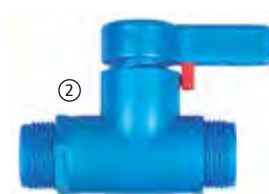
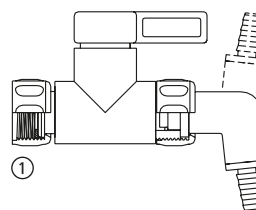


The StopCock discharge cocks fits all containers with R 3/4" connection threads. Thread adapters facilitate connection of cocks to nearly all containers.

- ▶ Tight-closing for complete seal
- ▶ Especially effortless
- ▶ With connecting cap nut, guaranteed vertical position of the cock
- ▶ Pressure-resistant up to 2 bar at 20°C (without discharge bracket and grommet)

- ▶ With discharge angle and rotatable spout preventing drips
- ▶ With tapered spout for bottles with narrow openings with a diameter from 6 to 8 mm.
- ▶ Media-contacting parts PP, PE and PTFE

Not suitable for crystallising substances!



Various designs of the stop-cock. Connecting thread 3/4" with union nut or external thread

Accessories

Description	Price €	Item no.
⑤ Hose nozzle StopCock 4 mm		0525-1304 N4
Hose nozzle StopCock 6 mm		0525-1306 N4
Hose nozzle StopCock 8 mm		0525-1308 N4
Hose nozzle StopCock 10 mm		0525-1310 N4
Hose nozzle StopCock 12 mm		0525-1312 N4
Hose nozzle StopCock 16 mm		0525-1316 N4
Discharge angle		0525-1400 N4

StopCock angled

Thread, inflowing side	Thread, outflowing side	Price €	Quantity	scale from	Scale price €	Item no.
① 3/4" inner thread cap nut	spout/nozzle		10			0525-1000 N4

StopCock straight-through

Thread, inflowing side	Thread, outflowing side	Price €	Quantity	scale from	Scale price €	Item no.
② 3/4" outer thread	3/4" outer thread		10			0525-3000 N4
③ 3/4" inner thread cap nut	3/4" outer thread		10			0525-5000 N4
④ 3/4" inner thread cap nut	3/4" inner thread cap nut		10			0525-7000 N4

Ball valve PP



Ball valve PP fits all containers with R 3/4" connection thread. It can be attached to nearly all containers with thread adapters. Robust industrial quality, large flow.

- ▶ Suitable for crystallising media
- ▶ Max. 4 bar pressure at 20°C
- ▶ With connecting cap nut, guaranteed vertical position of the valve
- ▶ Incl. discharge angle
- ▶ Hose nozzle 16 mm Ø
- ▶ Nominal width 12 mm Ø

Ball valve PP			
Price €	Quantity scale from	Scale price €	Item no.
	5		0500-0100 N4
Accessories			
Description	Price €	Item no.	
Sealing tape PTFE		0006-4514	N3

Ball valves PP for barrels



Ball valves for barrels made of PP for barrels with thread connections.

- ▶ Suitable for solidifying media
- ▶ Max. 4 bar pressure at 20 °C
- ▶ Individually adaptable, through various accessories

Ball valves PP for barrels

Thread, inflowing side	Thread, outflowing side	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2" outer	1/2" inner	15		10		0500-0112 N4
3/4" outer	3/4" inner	20		10		0500-0134 N4
1" inner	1" inner	25		5		0500-8001 N3
1/2" inner	1/2" inner	15		5		0500-8002 N3
3/4" inner	3/4" inner	20		5		0500-8003 N3

Accessories

Description	Price €	Item no.
Tube nozzles, fixed, straight 1/2" outer		8545-0012 N3
Tube nozzles, fixed, straight 3/4" outer		8545-0034 N3
Tube nozzles, fixed, straight 1" outer		8545-0100 N3
Tube bend, fixed, 1/2" outer		8547-0012 N3
Tube bend, fixed, 3/4" outer		8547-0034 N3
Tube bend, fixed, 1" outer		8547-0100 N3
Adapter for ball valve, Coarse thread Tri-Sure 2" outer, 3/4" inner		0600-0140 N3
Adapter for ball valve, Fine thread 2" outer, 3/4" inner		0600-0180 N3
Sealing tape PTFE		0006-4514 N3

Compact spigot



The spigot Compact for canisters and barrels captivates everyone through its compact build, which makes the valve on the canister ideal for use in refrigerators and on racks, etc. The short discharge does not protrude out over the lower edge of the container, which makes the valve a perfect choice even when space is very limited.

The discharge's specially optimised design creates an even stream of liquid with no splashing or spattering. The spigot features easy motion and a tight seal. It is screwed on with a connecting cap nut. This guarantees a vertical position of the valve and makes it possible to adjust the valve later on.

The Compact spigot fits all containers with R 3/4" connecting threads.

PP, PE and PTFE are materials that offer outstanding chemical resistance to acids and alkalis.

The Compact spigot is the ideal addition to Flachmann jerrycans – for perfect storage and filling when space is at a premium!

- ▶ Space-saving design
- ▶ Optimised discharge for even flow
- ▶ With connecting union nut for vertical position of the stop cock
- ▶ Tight-closing for complete seal



Compact spigot

Thread, inflowing side	Price €	Quantity scale from	Scale price €	Item no.
3/4" inner thread cap nut		10		0530-1000 N4



Compact jerrycan & StopCock set



The Compact jerrycan & StopCock set consists of the compact jerrycan Flachmann with glands (0435-2050) and the spigot StopCock (0525-1000).

Compact jerrycan & StopCock set

Price €	Quantity scale from	Scale price €	Item no.
	10		0435-0001 N4



Compact jerrycan & Compact stop cock set



The Compact stop cock is the ideal addition to Flachmann jerrycans – for perfect storage and filling when space is at a premium! The space-saving set consists of the compact Flachmann jerrycan with glands (0435-2050) and the spigot Compact (0530-1000).



Compact jerrycan & Compact stop cock set

Price €	Quantity scale from	Scale price €	Item no.
	10		0435-3000 N4



StopCock PA, electroconductive





Commercially available spigots made of the materials polyethylene or polypropylene cannot be used for solvents.

The spigot StopCock PA is made of electrically conductive polyamide and therefore perfectly suitable for solvents.

StopCock PA fits onto 3/4" outer threads and with the supplied adapter onto 3/4" inner threads and therefore onto nearly all commercially available canisters and barrels where the discharge thread is at the bottom.

- ▶ With discharge angle and rotatable spout preventing drips
- ▶ With tapered spout for bottles with narrow openings with a diameter from 6 to 8 mm.
- ▶ Media-contacting parts PA conductive to electricity and PTFE
- ▶ Supplied with PA adapter conductive to electricity for 3/4" inner thread

StopCock PA, electroconductive

Thread, inflowing side	Thread, outflowing side	Price €	Quantity scale from	Scale price €	Item no.	 
3/4" inner thread cap nut	spout/nozzle		10		0525-1100 N4	


Spigot "Brass"



Barrel tap for petrochemical liquids, closed independently when not used (increased safety), thread connection 3/4" on the outside.

- ▶ NW 10 mm

Spigot "Brass"

Price €	Quantity scale from	Scale price €	Item no.	
	10		0535-0010 N3	

Spigot "Air"



No additional ventilation opening required, PE, transparent, 3/4" thread connection outside.

- ▶ Self-venting
- ▶ NW 13 mm
- ▶ Seal made of natural rubber

Spigot "Air"

Price €	Quantity scale from	Scale price €	Item no.
	25		0533-0010 N3



Ball valve PP, food



Ball valve made of PP with outer / inner thread, fibre-glass reinforced, ball made of PP, handle with O-ring made of food-safe NBR and seal made of HDPE.

- ▶ Max. operating pressure 10 bar (at +20°C)
- ▶ Max. operating temperature 100°C
- ▶ Suitable for food

Hose angle bracket, 90°, with cap nut, inner thread and reducing nozzle.



Ball valve PP, food

Thread, inflowing side	Thread, outflowing side	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2" inner	M29x1,75 outer	15		10		0500-8102 N3
3/4" inner	M36x3 outer	20		10		0500-8103 N3
1" inner	M42x3 outer	25		10		0500-8101 N3
1/2" outer	M29x1,75 outer	15		10		0500-8202 N3
3/4" outer	M36x3 outer	20		10		0500-8203 N3
1" outer	M42x3 outer	25		10		0500-8201 N3

Accessories

Description	Price €	Item no.
Container connection, white 1/2" outer		8533-0012 N3
Container connection, white 3/4" outer		8533-0034 N3
Container connection, white 1" outer		8533-0100 N3
Tube bend with cap nut, thread M29x1,75		8548-0020 N3
Tube bend with cap nut, thread M36x3		8548-0025 N3
Tube bend with cap nut, white, thread M42x3		8548-0030 N3
Sealing tape PTFE		0006-4514 N3

Spigot Jumbo white



Spigot with spindle for R2" barrel thread, 50 mm flow, for viscous media such as lacquers, glue, shampoo.

- ▶ PE, white
- ▶ Seal made of black nitrile
- ▶ Discharge with R 2" fine thread outside

Spigot Jumbo, with tap



Spigot with tap for R2" barrel thread, 50 mm flow, for viscous media such as lacquers, glue, shampoo.

- ▶ Cost-effective tap
- ▶ PE, brown
- ▶ Seal made of EPT

Barrel valve



The barrel valve enables quick and clean emptying even with highly viscous liquids. It is suitable for metal barrel with 2" BSP TriSure metal barrel screw joint.

The barrel valve enables opening the barrel closure as well as emptying and reclosing it even with lying, full barrels without having to move them.

Spigot Jumbo white, with spindle

Price €	Quantity scale from	Scale price €	Item no.
	5		0534-0010 N4

Spigot Jumbo, with tap

Price €	Quantity scale from	Scale price €	Item no.
	10		0534-0020 N4

Barrel valve

Price €	Item no.
	0536-0010 N3

IBC discharge valves

The IBC discharge valve is a sturdy, high-quality ball valve with a hose connection and connection adapter including seal, for standard thread S 60x6 external or 1" external, designed to fit all commonly used European IBC containers.

With the appropriate thread, the discharge valve can also be screwed directly onto the original discharge valve that is already on the IBC tank if the original valve is leaking or faulty. In this way the IBC discharge valve ensures fast and reliable residual emptying of the container with good dosing.

The discharge valve is an indispensable accessory to ensure a professional connection of the hose or for filling from your IBC container.

- ▶ 1" flow
- ▶ Suitable for connection threads S 60x6 external or 1" external
- ▶ Discharge valve and PP fibreglass-reinforced sealing cap, ball, adapter and PP hose connection
- ▶ Max. operating pressure 10 bar (at +20°C)
- ▶ Max. operating temperature 80°C

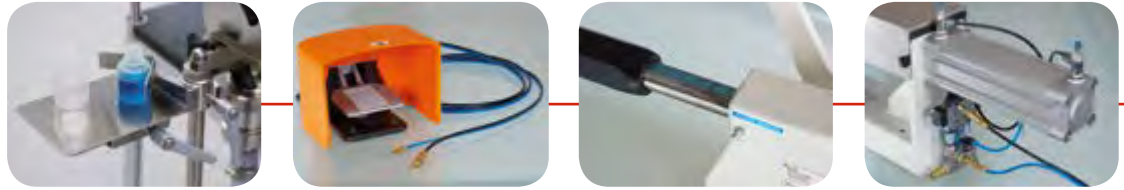
① IBC discharge valve with 90° hose nozzle and sealing cap. The hose can also be closed with the enclosed sealing cap. Hose nozzle external Ø 30 mm, suitable for flexible hoses.

② IBC discharge valve with innovative hose screw connection. The hose screw connection allows you to attach a wide range of hoses quickly, easily and reliably. No additional hose clamp is needed. Hose fitting, external Ø 25 mm.



① IBC discharge valve with angle discharge					
Price €	Quantity scale from	Scale price €	Item no.		
	5		0534-0002	N3	
② IBC discharge valve with hose screw connection					
Price €	Quantity scale from	Scale price €	Item no.		
	5		0534-0001	N3	

LiquoFill filler for fluids



- ▶ Metering accuracy +/- 0.5 %
- ▶ 300-800 fillings per hour
- ▶ Self-feeding

Accessories:

- ▶ Height-adjustable filling table made of stainless steel for positioning the container
- ▶ Nozzles with/without sieve, different diameters
- ▶ Diaphragm valves (for viscous products) and drip preventer (for products with low surface tension), only possible in pneumatic and semi-automatic drive

LiquoFill filler for fluids



i When ordering, please state the material to be filled. We will test the chemical resistance. Please always indicate the desired size when ordering filling tubes.

The LiquoFill fillers were specially developed for exact metering and filling of fluids of all types. LiquoFill is handy especially in small series, as the purchase of a stationary filling station designed in large series is often not profitable.

The metering and filling devices are used in production sites and laboratories for cosmetic, pharmaceutical and chemical products, paints as well as in the food and beverage industry.

LiquoFill is ready to operate, simple to handle and easy to clean. The fillers can be mounted on the table using a fastener or screwed directly on to the table; they are portable and therefore usable at different places.

The fill quantity can be calibrated precisely and continuously using an adjusting nut, without any tools and can be read at a display.

The adaptable hand lever facilitates use by both right- and left-handed individuals.

Parts in contact with the medium are made of stainless steel V4A (1.4404/1.4571), springs V2A (1.4310), PTFE and FCR (Fluorocarbon rubber). Housing made of aluminum, protection hoods made of stainless steel.

Different filling nozzles (Ø4/3 mm - Ø16/14 mm, with/without sieve) facilitate individual filling of diverse containers such as bottles, tubes, nozzles, crucibles or glasses.

LiquoFill filler for fluids

LiquoFill filler, manual mode of operation

Volumetric piston meter with manual drive. The fillers with manual operation can also be retrofitted with the pneumatic drive. Housing dimensions: LxWxH 690 x 150 x 350 mm.



LiquoFill filler, manual mode of operation

Dosing volume ml	Filling nozzle dia. mm	Price €	Item no.
8 - 80	6/4		5913-0020 NO
20 - 210	8/6		5913-0200 NO
50 - 500	10/8		5913-0500 NO

Accessories

Description	Price €	Item no.
Height-adjustable filler		5913-0001 NO
LiquoFill filling funnel, approx. 10l		5913-0002 NO
LiquoFill exchange kit, 8 - 80 ml		5913-0003 NO
LiquoFill exchange kit, 20 - 210 ml		5913-0004 NO
LiquoFill exchange kit, 50 - 500 ml		5913-0005 NO
LiquoFill seal kit for 5913-0020, -2020		5913-0006 NO
LiquoFill seal kit for 5913-0200, -2200		5913-0007 NO
LiquoFill seal kit for 5913-0500, -2500		5913-0008 NO

LiquoFill filler, pneumatic mode of operation

Volumetric piston meter with pneumatic drive, with start contact via foot-operated switch. For the pneumatic devices, compressed-air supply of 4 - 6 bar is required. Housing dimensions: LxWxH 1200 x 150 x 400 mm.



LiquoFill filler, pneumatic mode of operation

Dosing volume ml	Filling nozzle dia. mm	Price €	Item no.
8 - 80	6/4		5913-2020 NO
20 - 210	8/6		5913-2200 NO
50 - 500	10/8		5913-2500 NO

Accessories

Description	Price €	Item no.
Height-adjustable filler		5913-0001 NO
LiquoFill filling funnel, approx. 10l		5913-0002 NO
LiquoFill exchange kit, 8 - 80 ml		5913-0003 NO
LiquoFill exchange kit, 20 - 210 ml		5913-0004 NO
LiquoFill exchange kit, 50 - 500 ml		5913-0005 NO
LiquoFill seal kit for 5913-0020, -2020		5913-0006 NO
LiquoFill seal kit for 5913-0200, -2200		5913-0007 NO
LiquoFill seal kit for 5913-0500, -2500		5913-0008 NO

LiquoFill pro filler, semi-automatic drive

Cost-effective semi-automatic filling machine with reproducible speed setting. With start contact via foot-operated switch. With handwheel and display for precise, stepless adjustment of the metering volume. Housing dimensions: LxWxH 1150 x 135 x 370 mm.



LiquoFill pro filler, semi-automatic drive

Dosing volume ml	Filling nozzle dia. mm	Price €	Item no.
5 - 60	6/4		5913-4060 NO
30 - 300	8/6		5913-4300 NO
80 - 1050	10/8		5913-4550 NO

Accessories

Description	Price €	Item no.
Height-adjustable filler		5913-0001 NO
LiquoFill filling funnel, approx. 10l		5913-0002 NO
LiquoFill pro exchange kit, 5 - 60 ml		5913-4001 NO
LiquoFill pro exchange kit, 30 - 330 ml		5913-4002 NO
LiquoFill pro exchange kit, 80 - 1050 ml		5913-4003 NO
LiquoFill pro seal kit for 5913-4060		5913-4004 NO
LiquoFill pro seal kit for 5913-4300		5913-4005 NO
LiquoFill pro seal kit for 5913-4550		5913-4006 NO
Pneumatic drip preventer		5913-2000 NO

PastoFill filler for pasty substances



The PastoFill filler was specially developed for manual filling of highly viscous products. PastoFill is handy especially in small series, as the purchase of a stationary filling station designed mostly in large series is often not profitable.

The metering and filling devices are used in production sites and laboratories for cosmetic, pharmaceutical and chemical products, creams, salves as well as in the food and beverage industry.

PastoFill is ready to operate, simple to handle and easy to clean. The fillers can be mounted on the table using a fastener or screwed directly on to the table; they are portable and therefore usable at different places.

The fill quantity can be calibrated precisely and continuously using an adjusting nut, without any tools and can be read at a display.

Parts in contact with the medium are made of stainless steel V4A (1.4404/1.4571), PETP, NBR, PTFE and FCR (Fluorocarbon rubber). Housing made of cast aluminum. Housing dimensions: LxWxH 740 x 500 x 510 mm.

Different filling nozzles (Ø6/4 mm - Ø22/20 mm) facilitate individual filling of diverse containers such as bottles, tubes, nozzles, crucibles or glasses. Do not forget to indicate the desired size while ordering filling nozzles.

- ▶ Including feeding funnels 10 l
- ▶ Metering accuracy +/- 0.5 %
- ▶ 300 - 600 fillings per hour
- ▶ Self-feeding made of stainless steel funnel

Accessories:

- ▶ Filling nozzles for crucible and tube filling in different diameters
- ▶ Cover for feeding funnel

When ordering, please state the material to be filled. We will test the chemical resistance. Please always indicate the desired size when ordering filling tubes.

PastoFill filler for pasty substances			
Dosing volume ml	Filling nozzle dia. mm	Price €	Item no.
10 - 160	14/12		5913-1160 NO
30 - 260	14/12		5913-1260 NO
Accessories			
Description	Price €	Item no.	
PastoFill exchange kit for 5913-1160, 3 - 15 ml		5913-1110 NO	
PastoFill exchange kit for 5913-1260, 10 - 50 ml		5913-1111 NO	

Wall-mounted dosing machine | precise dosing



Wall mounted dosing machines for simple, clean and precise dosing of resins, lacquers, peroxides, epoxies and many other pumpable materials - without sticking and contaminating. For fixed use in the work place.

Use

1. Push the pump lever upwards. Read the dosage amount from the graduation on the glass cylinder.
2. Push the pump lever downwards. The liquid is pumped via the spigot directly into the container which is to be filled.

- ▶ Materials: Glass, PTFE, PE and stainless steel
- ▶ Easy cleaning
- ▶ Wall mounting prepared
- ▶ PE suction hose

Wall-mounted dosing machine

Dosing volume ml	Suction hose dia. mm	Division ml	Price €	Item no.
100	10	1		5912-0100 N2
250	22	5		5912-0250 N2
500	29	5		5912-0500 N2



Drain safety stand



Residual liquid from pump tubes or samplers can be reliably collected with the drain safety stand. The safety stand is resistant to diluted bases and acids. The collecting container can be filled with a neutralisation medium which dilutes and neutralises residual liquid.

The stand pipe is mounted on the wall with sturdy pipe clamps. The pipe clamps can simply be opened to remove the safety stand.

The container for collecting liquid can be unscrewed, making it convenient to replace or empty.

Drain safety stand

Total length cm	Inner dia. mm	Price €	Quantity scale from	Scale price €	Item no.
117	35		5		5618-1000 N4

General pump accessories



Threads can be ideally sealed with the sealing tape for threads made of PTFE. Low abrasion, excellent chemical resistance, temperature resistant from -80°C to + 260°C.

Sealing tape PTFE

Width mm	Length m	Price €	Quantity scale from	Scale price €	Item no.
12	12		10		0006-4514 N3



Universal barrel key for effortless opening even of tight barrel closures 3/4" to 2". An unbreakable tool made of zinc-plated steel.

Universal barrel spanner

Price €	Quantity scale from	Scale price €	Item no.
	10		5690-0090 N4



Hexagonal nut with inner thread.

▶ PE



Flat seals made of Polyethylene, transparent fitting outer or inner thread.

▶ PE

Hexagonal nuts

Thread	Price €	Quantity scale from	Scale price €	Item no.
1/2"		10		8537-0012 N3
3/4"		10		8537-0034 N3
1"		10		8537-0100 N3
2"		10		8537-0200 N3

Flat seals, PE

Thread	Model	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
1/2"	fits outer thread	10		10		8538-0012 N3
3/4"	fits outer thread	10		10		8538-0034 N3
1"	fits outer thread	10		10		8538-0100 N3
2"	fits outer thread	10		10		8538-0200 N3
1/2"	fits inner thread	10		10		8539-0012 N3
3/4"	fits inner thread	10		10		8539-0034 N3
1"	fits inner thread	10		10		8539-0100 N3

Rubiflex gloves



1



2

With short or long gauntlet. Safe working with fats, mineral oils, solvents and many acids and alkalis.

- ▶ Made from nitrile rubber
- ▶ Very flexible, soft to the touch
- ▶ High abrasion and cut resistance
- ▶ Comfortable cotton interlock interior
- ▶ To standard EN 374

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Rubiflex protective gloves					
Model	Length cm	Price €	Quantity scale from	Scale price €	Item no.
1 standard	37		10		2507-0002 N3
2 long wrist	60		10		2507-0003 N3

Protective gloves nitrile					
Price €	Quantity scale from	Scale price €	Item no.		
3	10		2507-0004 N3		

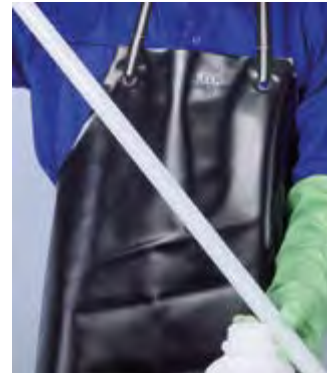
Nitrile gloves



3

Made of nitrile, proven when handling acids, fats and solvents.

Plastic apron made of PVC



Plastic apron made of PVC with eyelets, neck band and waist band welded into the apron, industry quality, black, fabric reinforced, size 80 cm x 100 cm.

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Plastic apron made of PVC				
Price €	Quantity scale from	Scale price €	Item no.	
	10		2507-1001 N3	

SafetyBox



Panorama safety goggles and protective gloves made of nitrile for personal safety, stored cleanly in a box. Recommended by trade associations.

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

SafetyBox			
Price €	Quantity scale from	Scale price €	Item no.
	10		2507-9000 N3

Eyes Fresh mini eyewash station



Mini eyewash station ideal for the lab, filling stations or all work places where aggressive substances are used. Eyes Fresh can be attached to any standard cold water tap. For normal use of the tap, just press the button and the function changes back from the eye wash (returns automatically to eyewash-function when the tap is closed). Can be fitted onto taps with M22x1, 1/2" or 3/8" outer thread.

Eyes Fresh mini eyewash station



Model	Price €	Quantity scale from	Scale price €	Item no.
Press button for normal use		5		2515-0100 N4

Eye rinsing bottle



Empty bottle for 600 ml contents, leakproof due to valve and dust protection cap. Instructions printed on (in German language), made of transparent PE.

Eye rinsing bottle



Price €	Quantity scale from	Scale price €	Item no.
	10		2507-2000 N3

Wall fixture

Price €	Quantity scale from	Scale price €	Item no.
	10		2507-2001 N3

Table of contents samplers



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Samplers

Sampling from liquids, bulk goods and viscous media

Take samples – but do it right!

Taking samples

When taking samples, a random test is taken from an overall quantity. These samples serve as the basis for the analysis regarding quality assurance. The correct procedure for taking spot samples is therefore a very important subject. Only with representative and authentic samples can reliable information about the quality, properties or composition of a particular material be provided.

Very precise material analyses can be carried out with the most up-to-date technology. However, the technology is no good if an error occurs when the sample is taken and this error continues through all phases of the analysis, with the consequence that the final result of the quality check is wrong.

Correct information about the properties of a material can only be provided if the sample is taken properly and treated in the same way as in the subsequent analysis. The basic point is that the properties and composition of the sample quantity correspond exactly with the material quantity that has to be evaluated.

Taking samples - but how?

When taking samples, some essential stipulations such as DIN-standards have to be complied with. The recommendation is to follow a company-internal checklist which should be a fixed component of a company's quality standards. All relevant steps for taking samples are documented in this checklist so that they can be traced at any time.



Location for taking samples

The location from where the samples are taken has to be as clean as possible. At the very least, the use of clean samplers, equipment and tools has to be considered. During the procedure, no external



factors must influence the sampling. Even small external contamination can significantly alter the examination result. Detergents which are used to clean the samplers or the sample packaging can also falsify the result of the analysis.

Taking samples - but who? - Qualified personnel

Only skilled personnel should take the samples. It must be guaranteed that sampling is carried out exactly in accordance with the stipulated DIN-standards or internal guidelines.

Technical knowledge is of utmost importance because altered circumstances can only be reacted to on-site. Only trained personnel can quickly and safely recognise mistakes that occur or altered circumstances and react accordingly.

Taking samples - with what? - Sampling equipment



Choosing the right sampling equipment depends on many different selection criteria. It depends on the material properties of the sampler as well as on the type of sampling, the container or the site where the material is located, and the frequency with which the sampling has to be carried out. In addition to individual requirements for sampling, all equipment should fulfil the basic principles explained below:



Sampler material

The equipment should be made of inert substances from which no material can come loose and which does not react with other substances and therefore cannot contaminate the sample. The inert substance depends on the medium to be sampled. As a general rule, samplers made of stainless steel and high-quality

plastic such as PTFE are very suitable.

Cleaning the sampling equipment

It should be easy and quick to clean the equipment and – under certain conditions – to sterilise it. In the food industry, sterile-packed disposable samplers are recommended which can be disposed of after use.

Processing the samplers

Samplers must not have any grooves or crevices because residual material collects in such crevices and cannot be easily removed. This means that cross-contamination and memory effects can no longer be ruled out.

Surface of the equipment

The samplers' surfaces have to be especially smooth, for example, electro-polished stainless steel or PTFE. This prevents material from being deposited and simplifies cleaning. When selecting the appropriate sampling equipment, you must ensure that it is finished properly on the inside. Equipment with only a smooth external surface will not meet any quality standards.

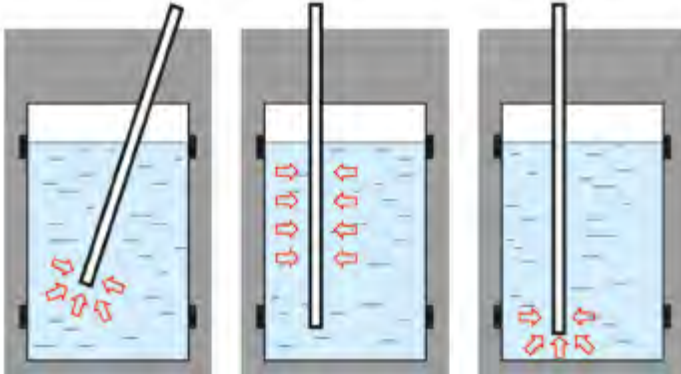
Sampling techniques – physical and analytical sampling

A distinction is made between physical and analytical/chemical sampling.

During **physical sampling**, the bulk density, material distribution, material properties and – if required – colouring or contamination are determined. It is especially important in this case that the sampler does not change or destroy the material's properties while taking the sample. A sample taken onsite still has to be transported. During packing and transport, the same high quality standards should apply as during sampling, so that the sample reaches the laboratory unaltered.

During **analytical sampling**, special attention must be paid to cleanliness in addition to the aspects listed above. However, the material properties can be disregarded at times because the sample will be specially processed. In this case, equipment can be used which changes the physical properties of the material.

Sampling techniques



From the left to the right: Point sampling, cross-sectional sampling, bottom sampling

Cross-sectional sampling

A sample is taken through all material layers to provide a representative cross-section.

Point sampling

A targeted sample is taken from a pre-determined point. This is done to determine the condition of the material precisely at this point, or several point samples are taken over a larger area or in a large volume container to get an authentic cross-section. All point samples together therefore provide a representative cross-section.

Completing the sampling procedure

After the sample has been taken, it must be packed for transport. Clean sampling containers connected directly to the sampling equipment are ideal. The sample has no contact with the environment and is packed for transport at the same time. The same conditions that relate to the sampling equipment also apply to packaging, storage, and transport of a sample.



Here, too, you must pay attention to the cleanliness of the packaging material and the risk of contamination from loose substances. The sample container is then labelled so that no mix-up can occur and taken to the laboratory – if necessary in coolers. Coolers with temperature monitors in which the ideal cooling temperature is maintained, are recommended.

Advice

If samples are taken from sacks or bags, the insertion points must be closed again afterwards. For this, special labels should be used that stick firmly to dirty surfaces and can be written on.



Any questions?

We will be happy to advise you. Talk to us - telephone +49 7635 82795-0. Or send an email to info@buerkle.de.

Bürkle GmbH - your partner for all questions about manual sampling.

Overview on sampling equipment

Product	Page	Liquids, normal	Liquids, aggressive	Liquids, flammable	Viscous substances/muds	Ice	Bulk goods, powders	Soil sampling	Transport of samples	Pharma	Sterile	Accessories
Zone sampler	68						x			x		
All-layer sampler	69						x			x		
EasySampler	71						x			x		
Spiralus zone sampler	71						x					
All-layer drill	72						x					
All-layer-scratcher	73				x		x					
Scratcher	73				x		x					
PowderProof®	74						x			x		
SiloDrill	76						x					
SiloPicker	78						x					
Novartos	79						x			x		
MicroSampler	80						x			x		
PharmaPicker	81						x			x		
PharmaSpoon	82				x		x					
StickProof	82						x			x		
Milky	83						x			x		
Tubus	83						x			x		
QuickPicker	84						x			x		
close-it control-seal	86						x	x				x
close-it food	88						x	x	x	x		x
close-it tape/food	89						x	x	x	x		x
seal-it	91							x			x	
safe-it, secure-it	92							x		x		
SampleSafe seal	93							x				x
Valve lance	94				x		x					
Pigment lance	94				x		x					
QualiRod	95				x							
Spatula	96				x	x	x					x
Mini ViscoSampler	97				x					x		
Stainless steel scoop	97	x		x	x		x			x	x	
ViscoSampler	98				x							
LiquiSampler	99	x	x									
Dip Sampler	100	x										
Disposable plunging siphon	101	x	x							x		
Scoop made of PTFE	101	x	x							x		
Chemistry scoop	102	x	x		x							
Liquid-sampler	103	x										
TeleScoop	104	x										
Stainless steel beaker	105	x			x		x					
ChemoSampler	106	x	x									

Product	Page	Liquids, normal	Liquids, aggressive	Liquids, flammable	Viscous substances/muds	Ice	Bulk goods, powders	Soil sampling	Transport of samples	Pharma	Sterile	Accessories
MiniSampler	108	x	x									
ProfiSampler	110	x	x									
Liqui zone sampler	112	x	x									
UniSampler	113	x										
UniSampler "Ex"	113	x		x								
Vampire	115	x	x									
Dipping bottle	116	x		x								
Immersion cylinder	117	x		x								
Dipping bottle Ex	117	x		x								
Immersion cylinder Mini	118	x		x								
Dipping vessel	118	x		x								
AquaSampler	119	x	x									
Target immersion cylinder	119	x										
Disposable Disposampler	121	x	x		x		x			x	x	
DispoPipette	122	x									x	x
PowderDispo	123						x			x	x	
SteriPlast scoops	125				x		x			x	x	
SteriPlast spatula	126				x		x			x	x	
SteriPlast sample spoons	127	x			x	x	x			x	x	
SteriBag	128	x			x	x	x	x	x	x	x	
SteriBag StandUp	129	x			x	x	x	x	x	x	x	
SteriPlast sampling tube	130	x	x							x	x	
SteriPlast syringe	130	x	x		x						x	
EasyScoop	132						x					
Scoop V2A (304)	132				x	x	x					
FoodScoop	133				x		x			x		
PharmaScoop	133				x		x			x		
LaboPlast scoops	137				x		x			x		
LaboPlast spatula	138				x		x			x		
LaboPlast sample spoons	139	x			x	x	x			x		
Scrapers	140				x	x						
Scoops made of PP	140						x	x				
Beefsteaker	142				x							
IceSampler	142				x	x						
Ice Drill	143				x	x						
GeoSampler	144									x		
Pürkhauer	144									x		
Mole	145									x		
Sampling containers	147									x	x	x
SnowPack dry ice machines	253									x		

Zone samplers | for all kinds of bulk goods



1. Multi sampler (closed chambers)
2. All layer sampler (open inner tube)
3. Uno sampler (one closed chamber)

Bürkle zone samplers are used for taking samples of bulk goods of any kind.

The big advantage of zone samplers is that all-layer samples can be collected from all layers of the container.

Various bulk goods can be collected with the lances, from the finest powder to large grains such as corn or nuts.

The zone samplers are available in different lengths. 55 cm (only Multi, Uno and All-layer sampler) especially suitable for sacks, 85 cm long (especially for barrels, tubs, mixed containers) and 150 cm as well as 250 cm (only Jumbo sampler) for big bags, silos, tanks.

Safe and reliable sampling is made even easier with useful special accessories such as sealing sleeves, Quali-Paper, cleaning brushes, emptying devices and close-it control seals.

The zone samplers are available in different models for different sampling tasks.

- ▶ Smallest possible gap between the inner and the outer tube
- ▶ Easy cleaning, removable tip
- ▶ Colour coding (Multi and Uno sampler)
- ▶ Ultra-pure materials
- ▶ Excellent processing, robust model



Colour coding: Identification to prevent mixing up multi samplers and single samplers.

Zone samplers | for all kinds of bulk goods



All-layer sampler, with open inner tube, no separate chambers, and large sampling volume. For all-layer samples through all the layers of the sample.

- ▶ Aluminium or V4A (1.4404)
- ▶ 25 mm Ø

Corresponds to ISTA standard for seed lengths of 10 mm (wheat, oats) and 5 mm (flax, vetches).



Multi sampler with several closed chambers, for multi point sampling from several predetermined sampling depths.

- ▶ Aluminium, V4A (1.4404) or V4A/PTFE
- ▶ Version made of V4A/PTFE with low weight due to PTFE sample chambers.
- ▶ With colour coding system
- ▶ 25 mm Ø



Uno sampler made of stainless steel V4A/PTFE with a closed sample chamber for point sampling from a predetermined sampling depth.

- ▶ Outer tube stainless steel V4A (1.4404), sample chambers made of PTFE
- ▶ With colour coding system
- ▶ 25 mm Ø



close-it seals openings. See p. 86.

All-layer-sampler

Material	Total length cm	Insertion depth mm	No. of openings	Chamber volume ml	Price €	Item no.
aluminium	55	430	3	70		5317-2055 N4
aluminium	85	710	3	130		5317-2085 N4
aluminium	150	1355	5	260		5317-2150 N4
V4A	55	430	3	70		5316-2055 N4
V4A	85	710	3	130		5316-2085 N4
V4A	150	1355	5	260		5316-2150 N4

Multi sampler

Material	Total length cm	Insertion depth mm	Number of collection chambers	Chamber volume ml	Price €	Item no.
aluminium	55	430	3	14		5317-1058 N4
aluminium	85	710	3	17		5317-1085 N4
aluminium	150	1355	5	17		5317-1150 N4
V4A	55	430	3	14		5316-3055 N4
V4A	85	710	3	17		5316-3085 N4
V4A	150	1355	5	17		5316-3150 N4
V4A/PTFE	55	430	3	14		5316-0055 N4
V4A/PTFE	85	710	3	17		5316-0085 N4
V4A/PTFE	150	1355	5	17		5316-0150 N4

Uno sampler

Material	Total length cm	Insertion depth mm	Number of collection chambers	Chamber volume ml	Price €	Item no.
V4A/PTFE	55	430	1	17		5316-1055 N4
V4A/PTFE	85	710	1	17		5316-1085 N4
V4A/PTFE	150	1355	1	17		5316-1150 N4

Use

1. Turn the handle, close the chambers.
2. Insert the sampler to the required depth.
3. Open the chambers, sample flows into the chamber.
4. Close the chambers.
5. Pull out the sampler.
6. Close the insertion opening with the close-it seal.
7. Empty the chambers onto Quali-Paper or with the emptying device.

Zone samplers | for all kinds of bulk goods



Jumbo sampler with a tube diameter of 50 mm, ideal for coarse grains and larger quantities. With an open inner tube and large sampling volume, for all-layer samples through all layers of the sample or with sample chambers separated by PTFE separators for multi point sampling from several predetermined sampling depths.

- ▶ Aluminium or aluminium/PTFE
- ▶ 50 mm Ø

Jumbo sampler

Model	Total length cm	Material	Insertion depth mm	No. of openings	Chamber volume ml	Price €	Item no.
All layer - open inner tube	85	aluminium	710	3	880		5319-1085 N4
All layer - open inner tube	150	aluminium	1355	5	1700		5319-1150 N4
All layer - open inner tube	250	aluminium	2355	7	2900		5319-1250 N4
Multi - closed chambers	85	aluminium/PTFE	710	3	390		5319-2085 N4
Multi - closed chambers	150	aluminium/PTFE	1355	5	650		5319-2150 N4
Multi - closed chambers	250	aluminium/PTFE	2355	7	910		5319-2250 N4



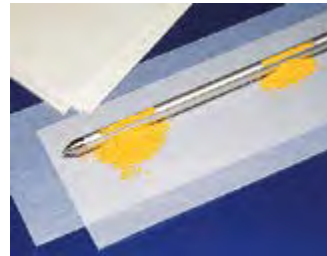
Accessories for zone samplers



Emptying device



Zone sampler sealing sleeves



Quali-Paper for zone sampler



Cleaning brushes

Emptying device

Model	Material	Length cm	Price €	Quantity scale from	Scale price €	Item no.
device with 3 funnels	V2A	100		5		5317-0030 N4
emptying funnel separate	V2A			3		5317-0033 N4

Sealing sleeves

Dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
25	3		10		5317-0011 N4
50	3		10		5317-0010 N4

Quali-Paper

L x W cm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
100 x 23	50		10		5317-0001 N4

Cleaning brushes

Dia mm	Length cm	Material	Price €	Quantity scale from	Scale price €	Item no.
25	40	PVC/stainless steel		10		5304-0040 N4
25	60	PVC/stainless steel		10		5304-0060 N4
25	80	PVC/stainless steel		10		5304-0080 N4
25	100	PVC/stainless steel		10		5304-0100 N4
50	100	PVC/stainless steel		5		5304-5100 N4
50	300	PVC/stainless steel		5		5304-5300 N4

Zone sampler Spiralus



- ▶ Representative sample of the container layers.
- ▶ Aluminium, anodised
- ▶ Tip PA
- ▶ 38 mm Ø
- ▶ Low weight



Zone sampler Spiralus guarantees precise zone sampling through all layers of the sample. The spiral arrangement of the sampling slits means that these are opened one after the other from bottom to top. In this way the lowest opening is filled first and then those above it in sequence until the complete Spiralus has been filled. The shape of the sampling slits prevents seeds from being cut up. The zone sampler Spiralus provides an excellent all-layer sample.

Applications

Spiralus is particularly suitable for sampling coarse-grained bulk goods, seeds and pellets at locations such as soil heaps, warehouses, trucks, railway goods wagons, etc.

Zone sampler Spiralus							
Total length cm	No. of openings	Weight g	Chamber volume ml	Price €	Item no.		
145	8	1400	770		5318-0145 N4		
200	8	2000	1100		5318-0200 N4		
Accessories							
Description	Price €	Item no.					
Cleaning brushes 50 mm dia., length 1000 mm		5304-5100 N4					

EasySampler | easy to empty



- ▶ Stainless steel V4A (1.4404)
- ▶ For sample opening from 52 mm Ø
- ▶ Length of the sample chamber 500 mm



It is possible to take multiple samples from bulk goods with this sampler quickly and easily.

Emptying has been greatly simplified and in this model takes place via the tip. The advantage: The sample can be emptied directly into the sample container without having to disassemble the EasySampler, in order to obtain a mixed sample for instance.

The bulk material must be free-flowing or self-flowing.

EasySampler has been developed in cooperation with an international chemical concern based in Ludwigshafen, Germany.

EasySampler							
Tube Ø mm	Total length cm	Volume ml	Price €	Item no.			
32	104,5	200		5360-1000 N2			

All-layer drill



The all-layer drill is a special zone collector specifically designed for heavily compacted substances. Often it is very difficult or impossible with conventional zone collectors to penetrate media of this type and take a sample extending through all layers. By contrast, the drilling blades of the all-layer drill burrow easily and quickly to the required depth without expending any great force. This makes it easy to take samples of media, even those with high density, and every type of highly compacted powders and granulates.

The all-layer drill thus allows you to take a representative sample through all the layers, even with greatly compressed media.

It is ideal for larger containers, mixed containers, big bags, etc. in the building materials, chemical, pharmaceutical, food and luxury items industries.

- ▶ Stainless steel V4A (1.4404)
- ▶ 25-mm diameter

Use

1. The all-shift drill is screwed manually into the bulk material.
2. The chambers are opened at the desired sample depth and the sample material flows in.
3. Close the chambers.
4. Remove or unscrew the all-shift drill.
5. Empty the sample through the open inner tube.



All-layer drill

Material	Total length cm	Insertion depth mm	No. of openings	Chamber volume ml	Price €	Item no.
V4A	150	1355	5	260		5310-0150 N4



Accessories

Description	Price €	Item no.
Cleaning brushes 25 mm dia., length 100 cm		5304-0100 N4

All-layer-scratcher



The scratcher is a special sampler for powders and granules that do not flow freely. The sample is transferred to the closable inner tube using a scraper. Sliding PTFE separators are used to divide the inner tube into different zones. The separators also prevent the sample from being mixed.

- ▶ For caked bulked goods
- ▶ Zones can be varied due to moveable PTFE separators.
- ▶ Made of stainless steel V4A (1.4404) and PTFE



All-layer-scratcher						
Dia. mm	Length mm	Chamber volume ml	Price €	Item no.		
25	1000	180		5351-1000	N2	
Accessories						
Description			Price €	Item no.		
Cleaning brushes 25 mm dia., length 100 cm				5304-0100	N4	

Scratcher | for non-pourable substances



The scratcher has particularly been designed for sampling cohesive, caked and not free-flowing substances.

- ▶ Stainless steel V4A (1.4404)
- ▶ Electro-polished
- ▶ Total length 1000 mm

Use

1. Insert the closed lance into the sample.
2. Open the inner tube by turning the sample chamber when at the required depth.
3. Turn the scratcher by 360° in the sample, the scraper directs the caked material into the sample chamber.
4. Close the sample chamber.

Scratcher						
Chamber volume ml	Flute length mm	Outer dia. with scraper mm	Price €	Item no.		
5	22	25		5347-0005	N2	
10	45	25		5347-0010	N2	
25	110	25		5347-0025	N2	

PowderProof® | mobile powder sampling

Quality assurance starts with the inspection of incoming goods! An all-layer sample of bulk goods is no longer a problem with PowderProof®, the sampler for powders and granules.

PowderProof® is the practically proven professional solution for mobile sampling of powders and granules. Different lances and augers can be attached to the robust drive unit and swapped without any problems. This modular design makes PowderProof® a versatile instrument for sampling powders and granules from drums, barrels, bags or sacks.

Safe and reliable sampling is made even easier with useful accessories such as basket-enclosed bottles, sample bags and close-it control seals.

PowderProof® with lance for horizontal use, such as sampling from sacks, with lance for vertical use, for sampling from open containers such as barrels, drums or bags.



PowderProof® | mobile powder sampling



- ▶ Many uses
- ▶ Stainless steel V4A (1.4404)
- ▶ Incl. motor 12 V, two re-chargeable batteries, fast charger, clip for holding the bag and cleaning brush
- ▶ Additional augers available as accessory

Use

1. The lance is inserted into the sack/container with the spiral screw rotating.
2. The powder or granules are immediately transported through the lance and filled directly into a sample bag or bottle at the lance outlet.
3. Any excess sample remaining in the lance is returned to the sack by reversing the spiral screw direction



PowderProof® for horizontal ...

... and vertical use

PowderProof®

Model	Lance	Insertion depth mm	Price €	Item no.
for powders up to 2mm dia.	horizontal	30		5302-0302 N2
for powders up to 2mm dia.	vertical	60		5302-0602 N2
for powders up to 2mm dia.	vertical	90		5302-0902 N2
for powders up to 2mm dia.	vertical	120		5302-1202 N2
for granules from 2 up to 4mm dia.	horizontal	30		5302-0301 N2
for granules from 2 up to 4mm dia.	vertical	60		5302-0601 N2
for granules from 2 up to 4mm dia.	vertical	90		5302-0901 N2
for granules from 2 up to 4mm dia.	vertical	120		5302-1201 N2

Accessories

Description	Price €	Item no.
Spiral screw for PowderProof® for powders up to 2mm dia., 30 cm		5302-0312 N2
Spiral screw for PowderProof® for powders up to 2mm dia., 60 cm		5302-0612 N2
Spiral screw for PowderProof® for powders up to 2mm dia., 90 cm		5302-0912 N2
Spiral screw for PowderProof® for powders up to 2mm dia., 120 cm		5302-1212 N2
Spiral screw for PowderProof® for granules from 2 up to 4mm dia., 30 cm		5302-0311 N2
Spiral screw for PowderProof® for granules from 2 up to 4mm dia., 60 cm		5302-0611 N2
Spiral screw for PowderProof® for granules from 2 up to 4mm dia., 90 cm		5302-0911 N2
Spiral screw for PowderProof® for granules from 2 up to 4mm dia., 120 cm		5302-1211 N2
Bag clip for PowderProof®		0006-6259 N4
Transport case LxWxH 121x22,5x11 cm		3600-2120 N4
Sampling bottle LDPE 500 ml		0318-0500 N3
Basket for sample bottles, 500 ml, incl. holding ring		5302-2050 N2
Packaging bags with closure, 170x120 mm, 400 ml, 100 pieces		2348-0005 N3

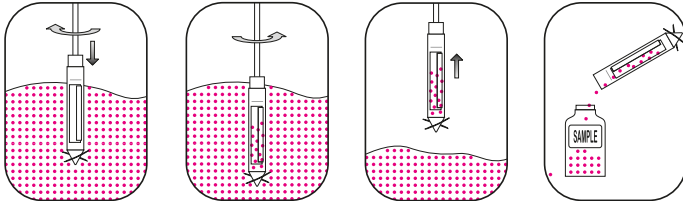
SiloDrill | for sampling from silo vehicles

- ▶ Drill tip with drilling blades for easy boring



© lichtkunst_73/Pixelio

SiloDrill | for sampling from silo vehicles



If bulk goods are transported over long distances (in trucks, railway goods wagons), separation may occur.

Taking the sample just from the surface therefore leads to the wrong result.

Representative samples from all layers of the silo can be taken with the SiloDrill. The SiloDrill fits through all standard openings with its diameter of 90 mm.



- ▶ Of stainless steel V2A (1.4301) or aluminium
- ▶ Standard length 150 cm, extendable in increments of 100 cm, max. 350 cm
- ▶ Sprung inner tube prevents jamming of coarse grains
- ▶ Scraper edge for cohesive substances
- ▶ Sturdy, removable T-handle
- ▶ Drill tip with drilling blades for easy boring
- ▶ Easy removal of the sample chamber, simple cleaning

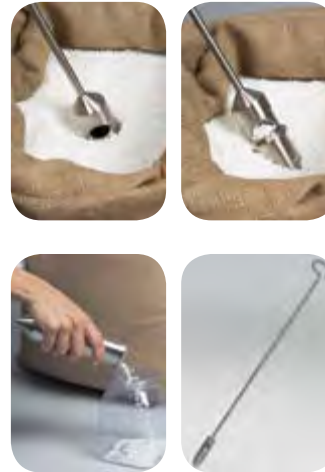
SiloDrill

Material	Total length cm	Spiral screw dia. mm	Chamber dia. mm	Volume ml	Price €	Item no.
aluminium	150	90	40	400		5301-1000 N4
V2A	150	90	40	400		5301-2000 N4

Accessories

Description	Price €	Item no.
SiloDrill extension V2A, 100 cm		5301-0500 N4
Transport case LxWxH 121x22,5x11 cm		3600-2120 N4

Silo sampler SiloPicker



The SiloPicker is ideal for taking bulk goods samples from silos. Using the extension rods, samples can be taken from depths down to 3.5 m.

The insertion depth depends on the density of the bulk goods.

- ▶ Stainless steel V4A (1.4404)

Use

1. Insert SiloPicker into the bulk goods. When this is done, the closure sleeve automatically closes the collection container.
2. When the sampling depth has been reached, the closure sleeve is opened by gently pulling back the SiloPicker, the sampling container is filled.
3. Pull out the SiloPicker and empty it.

Silo sampler SiloPicker						
Chamber volume ml	Length cm	Outer dia. mm	Price €	Item no.		
100	130	50		5340-1100 N4		
Accessories						
Description				Price €	Item no.	
SiloPicker extension 50 cm					5380-0508 N4	
SiloPicker extension 100 cm					5380-1008 N4	
SiloPicker handle					0006-8112 N4	
SiloPicker sample container					5340-0100 N4	
Transport case LxWxH 121x22,5x11 cm					3600-2120 N4	

Unit-Dose-Sampling

During powder separation checks and purity validations of powders, liquids and semi-solid substances, special procedures (unit-dose-sampling) must be employed to achieve the desired results.

Special sampling methods, which are required especially in the pharmaceutical industry in conformance with FDA and GMP specifications, require samplers with special features.

- ▶ High degree of preciseness
- ▶ Groove-free surfaces, electro-polished if possible
- ▶ AISI 316 stainless steel or PTFE materials
- ▶ Sterilisable
- ▶ Easy and perfect cleaning

Many Bürkle Samplers fulfill these demands, have been tested in actual practice, and are distinguished by especially sturdy and precise machining.

Novartis is a pharma zone sampler for unit-dose sampling:

- ▶ For various sampling depths with simultaneous double sample (Duo-Sampler).
- ▶ Precise volume calibration with 40 exchangeable sample inserts with volumes from 0.1 ml to 4.0 ml, in increments of 0.1 ml.

Novartos | pharma zone sampler for sampling according to FDA guidelines for unit-dose sampling



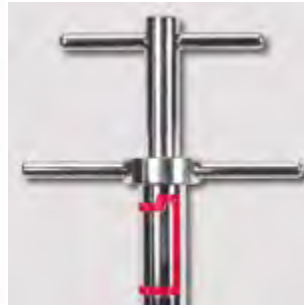
The Novartos Multi has 14 sample chambers for up to seven sample zones for an all-layer sample.

Novartos was developed on cooperation with a globally-operating pharmaceuticals and chemicals corporation located in Basel, Switzerland.

- ▶ The sample inserts fit precisely and can easily be replaced.
- ▶ Inserts are available in volumes from 0 to 4.0 ml
- ▶ The insertion depths can easily be read from the laser-engraved depth scale
- ▶ Stainless steel V4A (1.4404 / 1.4571)
- ▶ Groove-free and hand-polished
- ▶ 25 mm Ø



Novartos Uno sampler with two sample chambers, for one sample zone.



Novartos double-sample



⚠ Please order inserts separately!

Novartos the Pharma zone sampler according to FDA Guidelines Unit-Dose-Sampling. It is now possible to withdraw a double-sample without inserting the lance repeatedly into the bulk material. Mixing is mainly prevented in this way.

One significant advantage of Novartos is the easy cleaning.

Complete filling and emptying of sample chambers has been improved substantially using computer-optimised geometry. There are no crevices or dead spaces where sampling residues can collect.

- Novartos Uno for targeted sampling
- Novartos Multi enables all-layer samples

Novartos Multi			
Model	Length mm	Price €	Item no.
without inserts	1000		5358-1000 N4
Accessories			
Description	Price €	Item no.	
Transport case LxWxH 121x22,5x11 cm		3600-2120 N4	

Novartos Uno			
Model	Length mm	Price €	Item no.
without inserts	600		5358-0600 N4
without inserts	1000		5358-1001 N4
without inserts	1400		5358-1400 N4
Accessories			
Description	Price €	Item no.	
Transport case LxWxH 121 x 22,5 x 11 cm (not for Novartos 1400mm)		3600-2120 N4	

Accessories		
Description	Price €	Item no.
Inserts for Novartos Multi capacity 0,0 ml		5358-0000 N4
Inserts for Novartos Multi, capacity 0,5 ml		5358-0005 N4
Inserts for Novartos Multi, capacity 1 ml		5358-0010 N4
Inserts for Novartos Multi capacity 1,5 ml		5358-0015 N4
Inserts for Novartos Multi, capacity 2 ml		5358-0020 N4
Inserts for Novartos Uno, capacity 0 ml		5358-0100 N4
Inserts for Novartos Uno, capacity 0,5 ml		5358-0105 N4
Inserts for Novartos Uno, capacity 1 ml		5358-0110 N4
Inserts for Novartos Uno, capacity 2 ml		5358-0120 N4
Inserts for Novartos Uno, capacity 3 ml		5358-0130 N4
Inserts for Novartos Uno, capacity 4 ml		5358-0140 N4

MicroSampler | useful for taking small samples, sterilisable



Use

1. Insert MicroSampler into powder.
2. At the predetermined point, open the volume tip by pressing the button, the sample flows in.
3. Close the volume tip, the sample is collected.
4. Pull back the lance, open the volume tip again, empty the sample.

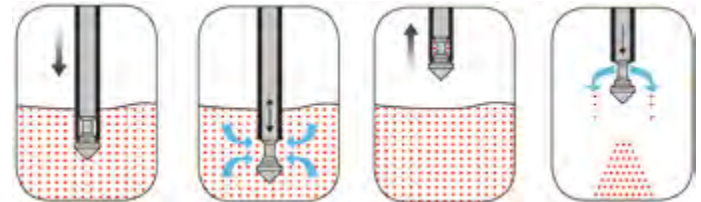
The MicroSampler has especially been designed for the sampling of small quantities of powder.

Volumes of 0.2 ml, 0.5 ml, 1.0 ml, 2.0 ml, 5.0 ml and 10 ml can be sampled easily, quickly and cleanly from different sampling depths from sacks or containers.

The tips of the MicroSampler are interchangeable. This means that tips with different volumes can be used.

- ▶ Point sampling
- ▶ Various lengths and volumes are available
- ▶ Tip can be removed, easy cleaning
- ▶ Stainless steel V4A (1.4404)
- ▶ Sterilisable
- ▶ Additional tips are available in different sizes

Please order lance and head separately!



MicroSampler

Tube Ø mm	Length cm	Model	Price €	Item no.
12	55	without head		5307-1055 N4
12	85	without head		5307-1085 N4
12	120	without head		5307-1120 N4
25	55	without head		5307-2055 N4
25	85	without head		5307-2085 N4
25	120	without head		5307-2120 N4

Accessories

Description	Price €	Item no.
MicroSampler heads fits tube with 12 mm dia., capacity 0,2 ml		5307-0102 N4
MicroSampler heads fits tube with 12 mm dia., capacity 0,5 ml		5307-0105 N4
MicroSampler heads fits tube with 12 mm dia., capacity 1ml		5307-0110 N4
MicroSampler heads fits tube with 25 mm dia., capacity 2 ml		5307-0202 N4
MicroSampler heads fits tube with 25 mm dia., capacity 5 ml		5307-0205 N4
MicroSampler heads fits tube with 25 mm dia., capacity 10 ml		5307-0210 N4

PharmaPicker | for sampling very small quantities



For sampling very small quantities of highly potent, expensive or active powders for analysis. The smallest sample quantities from 0.1 ml to 2.5 ml can be collected with the PharmaPicker. By simply exchanging the volume tip in the collection cylinder for 0.1 - 1.2 ml or 1.25 - 2.5 ml, the sampling volume is modified.

The PharmaPicker has a length of 60 cm and can be extended repeatedly by 50 cm or 100 cm, maximum length 3.50 m. The PharmaPicker is available separately or as PharmaPicker Case in a handy transport box.

PharmaPicker Case consisting of: Collection cylinders in both sizes, extension rod 50 cm and 100 cm, handle, volume tips 0.4 ml, 0.6 ml, 0.8 ml, 1.0 ml, 1.2 ml, 1.4 ml, 1.8 ml, 2.0 ml, 2.3 ml and 2.5 ml (alternative sample volumes on request), transport box.

Use

1. Insert the required volume tip into the collection cylinder.
2. Insert the PharmaPicker, the disk sleeve closes the collection cylinder automatically.
3. The disk sleeve opens the collection cylinder at the required point, and the desired sample is collected.
4. Withdraw the PharmaPicker completely.
5. Empty the sample directly from the collection cylinder into the analysis container.

- ▶ Stainless steel V4A
- ▶ Electro-polished

Please order lance and head separately!

PharmaPicker					
Model	Price €	Item no.			
with collection cylinder for - ml, without head		5346-1000 N2			
with collection cylinder for - ml, without head		5346-2000 N2			
Case, completely		5346-0010 N2			

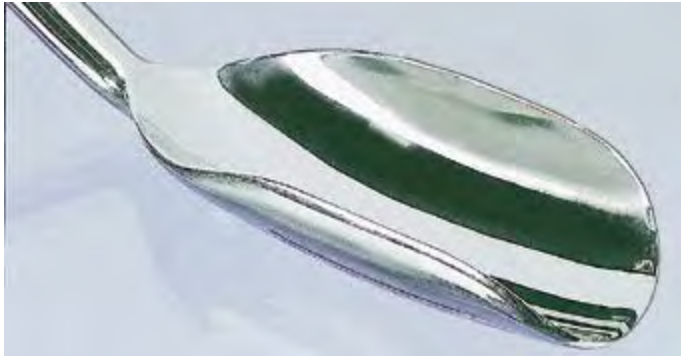
Accessories

Description	Price €	Item no.
Volume heads for PharmaPicker, capacity 0,10 ml		5346-1010 N2
Volume heads for PharmaPicker, capacity 0,20 ml		5346-1020 N2
Volume heads for PharmaPicker, capacity 0,60 ml		5346-1060 N2
Volume heads for PharmaPicker, capacity 1,00 ml		5346-1100 N2
Volume heads for PharmaPicker, capacity 2,00 ml		5346-2200 N2
Volume heads for PharmaPicker, capacity 2,50 ml		5346-2250 N2

Accessories

Description	Price €	Item no.
Extension rod PharmaPicker 500 mm		5380-0506 N4
Extension rod PharmaPicker 1000 mm		5380-1006 N4
Collection cylinder for 0,10 - 1,20 ml, without volume head		5346-1001 N2
Collection cylinder for 1,25 - 2,50, without volume head		5346-2001 N2
Handle PharmaPicker		0006-8113 N3

PharmaSpoon | for ultrapure sampling



PharmaSpoon for taking samples of powdery substances, intermediate products and material in the pharmaceutical industry. Special materials with excellent surface qualities must be used for this to prevent cross-contamination. Our PharmaSpoon fulfils these requirements. Made of stainless steel V4A (1.4404), surface highly polished by hand (not electro-polished!). The excellent surface properties of the PharmaSpoon provide significant advantages.

- ▶ Possible residues are even visible in the trace sector (μg sector)
- ▶ The surface is easy to clean
- ▶ The PharmaSpoon is also suitable for sterile sampling

i The PharmaSpoon was developed by an internationally known pharmaceutical company in Basel, Switzerland, and its usefulness has been confirmed in actual practice.

PharmaSpoon

Total length mm	Price €	Quantity scale from	Scale price €	Item no.
650		5		5324-0001 N2

StickProof



Sampler for powder in the pharma area, made of stainless steel V4A, material 1.4404. The especially slender tip can be inserted easily and deeply in order to take the sample. The conical inlet of the tip allows the collection of either very small or larger quantities. StickProof is constructed in one piece without edges, grooves or crevices for perfect and easy cleaning. The sample can be filled directly into the sampling bag from the outlet end. Fasten the bag with a sturdy clamp.

i Corresponds to ISTA standard for seed lengths of 10 mm (wheat, oats) and 5 mm (flax, vetches).

- ▶ Surface electro-polished
- ▶ Various sample quantities up to approx. 50 ml
- ▶ Incl. clamp and 100 PE sampling bags 120 x 170 mm

StickProof

Length mm	Dia. mm	Price €	Quantity scale from	Scale price €	Item no.
410	25		5		5338-0410 N4
1100	25		5		5338-1100 N4

Accessories

Description	Price €	Item no.
StickProof clamp		5338-0001 N2
Packaging bags with closure, 170x120 mm, 400 ml, 100 pieces		2348-0005 N3

close-it control seals see page 86

Sampling lance Milky | acc. to EN ISO 707



Universal powder and granules sampler made of stainless steel V4A. Developed initially for milk powder samples, conforms to standards of DIN and IDF (International Dairy Federation). The collector is inserted into bags or casks and the sample is removed using a semi-circular profile lance.



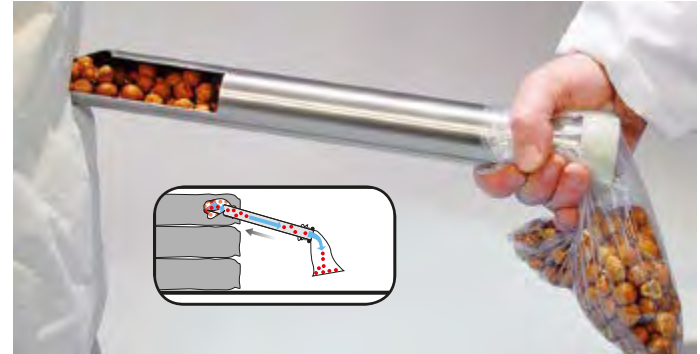
- ▶ Stainless steel V4A (1.4404)
- ▶ Insertion depth 385 mm
- ▶ Total length 480 mm
- ▶ Outer diameter approx. 28 mm

close-it seals and close-it food lock seals ensure non-leak closure of the insertion point in bags and BigBags. Page 86.

Sampling lance Milky

Volume ml	Price €	Quantity scale from	Scale price €	Item no.
150		5		5321-0300 N4

Sampler Tubus



Sampler for pourable bulk goods up to approx. 1 cm in diameter. This makes it possible, for example, to remove hazel nuts, blends of tea, grain or similar items from large sacks.

- ▶ Also for coarse-grained bulk goods
- ▶ Made of stainless steel V4A (1.4404)
- ▶ Special geometry of the tip

i Corresponds to ISTA standard for seed lengths of 10 mm (wheat, oats) and 5 mm (flax, vetches).

Use

1. Insert Tubus into a sack to the desired sampling depth, while keeping the collection tube closed using your hand.
2. When you remove your hand, the sample flows directly through the open tube into the container or sampling bag beneath it.

Sampler Tubus

Length cm	Dia. mm	Price €	Quantity scale from	Scale price €	Item no.
40	40		10		5382-0040 N4
80	40		10		5382-0080 N4

Accessories

Description

close-it control seals see page 86

QuickPicker | collects samples quickly and channels them directly into the sampling bottle



The core sampler QuickPicker is particularly suitable in the event that bulk goods are taken directly from sacks or bags and have to be filled into the original sampling bottle directly. QuickPicker is uncomplicated in its use and cleaning. No undercuts or edges mean no sample residues which could falsify subsequent samples. It is therefore ideal for quality control.

The sampler QuickPicker is delivered complete with two 250 ml PE sample bottles and with a cleaning brush.



QuickPicker | collects samples quickly and channels them directly into the sampling bottle

- ▶ Insertion depth 30 cm, diameter 25 mm
- ▶ Made of stainless steel (1.4404) approved for use with foodstuffs or PP transparent for aggressive chemicals, scratchproof, sterilisable, cost-effective
- ▶ Removable tip, easy cleaning
- ▶ Additional sampling bottles made of PE or PP available as accessories



QuickPicker V4A in use

i Corresponds to ISTA standard for seed lengths of 10 mm (wheat, oats) and 5 mm (flax, wetches).



close-it seals and close-it^{food} lock seals ensure non-leak closure of the insertion point in bags and BigBags. See page 86.

QuickPicker

Material	Insertion depth mm	Total length cm	Volume ml	Price €	Quantity scale from	Scale price €	Item no.
V4A	300	50	75		5		5322-1300 N4
PP, transparent	300	50	75		5		5322-0300 N4



Accessories

Description	Price €	Item no.
Sampling bottle LDPE, 250 ml		0318-0250 N3
Sampling bottle PP, 250 ml		0319-0250 N3
Transport case for QuickPicker		3600-3000 N3
close-it control seals see page 86		

close-it control seal | essential for sampling

- ▶ close-it – standard size 95 x 95 mm
- ▶ close-it Maxi - 150 x 150 mm, for larger holes or longer tears in containers
- ▶ The labels are supplied in handy rolls
- ▶ The cross perforations allow each label to be separated from the roll individually



close-it control seal | essential for sampling

Taking samples from sacks, boxes, bags, etc. with sampling lances is a common and time-proven practice. This produces holes through which easily flowing bulk goods could escape from the container. With the close-it seal, this can be prevented in an uncomplicated manner.

close-it has been especially developed for this purpose. The label has a sandwich-type structure (aluminium/ paper) and seals the container hermetically (vapour barrier). This virtually prevents hygroscopic powders from clumping together. The label is not just used to provide a hermetic seal. It is also used for providing quality control information (sampling date, release yes/no, name of tester, etc.). The labels are available in different colours. With printing in red, blue, green, yellow, black, neutral, without printing in white.

close-it can be written on with ball-point pen, pencil or felt-tip marker.

The rear of the label is coated with a powerful adhesive. This means that close-it sticks firmly

to most commercial containers, even to surfaces coated with fine powder, slightly moist or even frozen surfaces where conventional labels or adhesive tape will not stick.



Control seal close-it 95x95

Colour	Model	W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
red	printed	95 x 95	500		10		5303-0012 N4
yellow	printed	95 x 95	500		10		5303-0014 N4
blue	printed	95 x 95	500		10		5303-0015 N4
green	printed	95 x 95	500		10		5303-0016 N4
black	printed	95 x 95	500		10		5303-0011 N4
white	unprinted	95 x 95	500		10		5303-0002 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 95 x 95 mm		5303-9000 N4

Control seal close-it maxi 150x150

Colour	Model	W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
red	printed	150 x 150	250		10		5303-1012 N4
yellow	printed	150 x 150	250		10		5303-1014 N4
blue	printed	150 x 150	250		10		5303-1015 N4
green	printed	150 x 150	250		10		5303-1016 N4
black	printed	150 x 150	250		10		5303-1011 N4
white	unprinted	150 x 150	250		10		5303-1002 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 150 x 150 mm		5303-9100 N4

Control seal close-it^{food}

In response to numerous requests from our customers, we have developed close-it^{food}, a control seal with an adhesive approved for use with foodstuffs. The strength of the adhesive is almost as powerful as that of the original, the close-it from Bürkle, proven millions of times. close-it^{food} also reliably prevents products from leaking out after sampling.

The adhesive complies with the European guidelines for foodstuffs. Just like the original, close-it^{food} has a barrier layer of aluminium foil. This means that close-it^{food} is suitable for sampling foodstuffs, pharmaceuticals, cosmetics, food additives, even frozen goods – in short, for all applications in which cleanliness is particularly important.

- ▶ According to FDA Guidelines
- ▶ Particularly suited for the food and pharma industry



Control seal close-it^{food} 95x95

Colour	Model	W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
red	printed	95 x 95	500		10		5303-2017 N4
yellow	printed	95 x 95	500		10		5303-2020 N4
blue	printed	95 x 95	500		10		5303-2021 N4
green	printed	95 x 95	500		10		5303-2022 N4
black	printed	95 x 95	500		10		5303-2023 N4
white	unprinted	95 x 95	500		10		5303-2018 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 95 x 95 mm		5303-9000 N4

Control seal close-it^{food} Maxi 150x150

Colour	Model	W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
red	printed	150 x 150	250		10		5303-3017 N4
yellow	printed	150 x 150	250		10		5303-3020 N4
blue	printed	150 x 150	250		10		5303-3021 N4
green	printed	150 x 150	250		10		5303-3022 N4
black	printed	150 x 150	250		10		5303-3023 N4
white	unprinted	150 x 150	250		10		5303-3018 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 150 x 150 mm		5303-9100 N4





Besides the individually detachable close-it and close-it^{food} closure labels, our repeatedly tested and proven control seal is now also available on a continuous roller. This helps you discover whether you require only a small piece, for example for closing a small hole, or for marking a specific point. Or whether you want to repair a long crack or a large hole quickly, reliably and easily.

With its extremely strong adhesive strength, close-it^{tape} holds on the most diverse bases, where the glue effect of normal adhesive tape quickly reaches its maximum capacity.

For universal use, we have kept the adhesive tape close-it^{tape} in white with tear-off lines. It can be labelled with permanent ink and locks gas-proof. Available in the classic close-it design, as well as close-it^{tape}^{food}, with a food-compatible adhesive.

- ▶ Customizable
- ▶ Different designs
- ▶ For larger holes or longer tears in containers

close-it tape

Width mm	Model	Length m	Price €	Quantity scale from	Scale price €	Item no.
95	standard	50		10		5303-0017 N4
150	standard	50		10		5303-1017 N4
95	food	50		10		5303-2019 N4
150	food	50		10		5303-3019 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 95 x 95 mm		5303-9000 N4
close-it dispenser for labels with 150 x 150 mm		5303-9100 N4

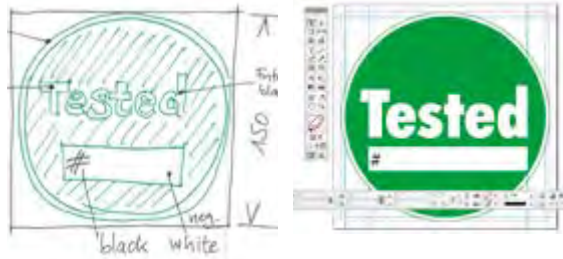
close-it | with individual customer-specific special printing

Custom-made according to the customer's specifications

The close-it control seal has many satisfied users who use close-it as a control seal, for documentation or as an informative label.

Your individual close-it

We would be happy to help you design your own close-it. Do you need final artwork for your draft? Or would you like to use our complete graphics service from draft stage through the print process? Our advertising department would be happy to consider any challenge!



Your idea



Our draft



Finishing and print



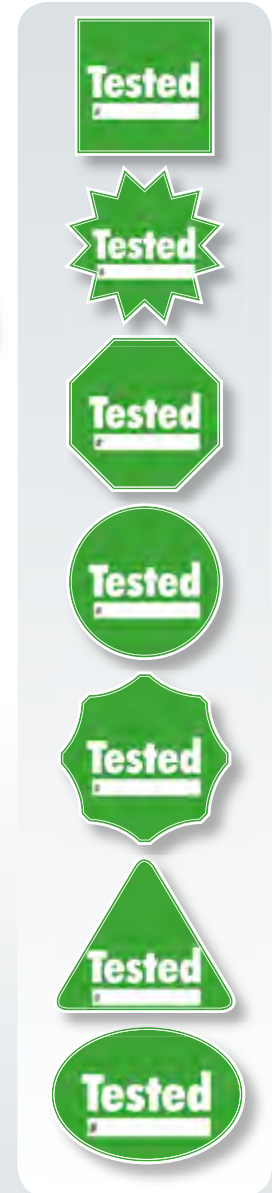
Your close-it label

Shape and colour

Round, square, rectangular or other shape? Unusual contours can also be implemented! We would be pleased to provide you with a quote. Of course print is available in all colours, with either single or multiple colours.

Finishing

close-it can be manufactured with or without carrier paper perforations. Different numbers of close-it labels can be supplied in a single roll.



seal-it security seal | for retention samples and tamper-proof packs

close-it dispenser



Retention samples are kept to provide a sample for comparison at a later date. The unambiguous proof that the retention sample is identical to the original sample is only possible with clearly marked and sealed containers. However, sealing is frequently not possible unless eyelets are present. seal-it provides the solution! The seal-it self-adhesive label sticks to all conventional containers. Thanks to its unbelievable adhesive power it cannot be removed.

If a container opening is closed with seal-it, then the container cannot be opened without destroying the seal-it label. seal-it is additionally provided with several cross-perforations which immediately tear when manipulated like a motorcar tax disc.

seal-it can be used to securely seal bottles, sample bags, sacks, specimen bags, envelopes, etc. – in principle any type of container. The aluminium foil adapts seal-it to any container shape. The white labelling field on seal-it can be written on with all conventional writing tools with, for example, contents information, sampling date, name of operator, etc.

- ▶ Clear identification via numbers in sequence
- ▶ Integrated control label with the same number, for accompanying documents
- ▶ Format 178 mm long, 30 mm wide
- ▶ Tear-off perforation for each label

seal-it security seal

Length mm	Width mm	Colour	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
178	30	red	500		5		5399-0003 N4



The close-it dispenser ensures safe storage and simple removal of the labels. The labels can be conveniently written on due to the marking plate.

- ▶ For close-it standard size 95 x 95 mm or close-it Maxi 150 x 150 mm

close-it dispenser

Model	Price €	Item no.
for labels with 95 x 95 mm		5303-9000 N4
for labels with 150 x 150 mm		5303-9100 N4

Tamper proof labels safe-it and secure-it



The safety labels safe-it and secure-it are used as originality seals and as protection from manipulations of e.g. samples, retention samples, for transporting samples, sealing containers with important or dangerous chemicals in the lab as well as sealing letters, shipments and much more.

The initial opening of a package is made obvious and irrevocably visible with the seal guaranteeing originality, unauthorised opening can therefore be proven.

If the safety label is removed, it divides into separate layers. A pattern that was previously hidden appears on the surface and is irreversible. The glue leaves a residue on the surface that cannot be removed (a so-called void label). Once the label has been removed, it cannot be used again. Changing the label or modifying it afterwards are therefore not possible.

When the safe-it security seal has been broken, a silver checkerboard pattern appears on both the subsurface and surface of the sticker itself.

- ▶ With checkerboard pattern
- ▶ Visible proof of tampering

Tamper proof labels safe-it

W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
95 x 20	500		5		5303-5000 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 95 x 95 mm		5303-9000 N4

Tamper proof labels secure-it



When the secure-it security label has been broken, a bright purple stop sign pattern appears on both the subsurface and surface of the sticker itself. A labeling field is available for comments and notes.

- ▶ With labeling field
- ▶ With stop sign pattern
- ▶ Visible proof of tampering

Tamper proof labels secure-it

W x H mm	Pieces per roll	Price €	Quantity scale from	Scale price €	Item no.
95 x 20	500		5		5303-5010 N4

Accessories

Description	Price €	Item no.
close-it dispenser for labels with 95 x 95 mm		5303-9000 N4

SampleSafe seal | secure your samples



Retained samples must be always secured against falsification and ambiguity in identification. Bottles with sealing eyelets should therefore be secured with SampleSafe seals.

The seals are made of stable polypropylene. The seals are to be uniquely identified with the serial 9-digit number.

The seal ring has a diameter of 2 mm, therefore SampleSafe seals also fit through small eyelets and slits. The seal tape is secured in the closure chamber by a metal insert made of stainless spring steel. The one-way tightening mechanism offers additional security against manipulation. It is not possible to forcibly open or manipulate the closure of the seal without leaving behind clear traces.

- ▶ Clear identification via numbers in sequence
- ▶ 100 seals (10 strips) per pack.
- ▶ Protection against manipulation by stainless steel safety spring.

SampleSafe seal

Length mm	Dia. mm	Colour	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
260	2	red	100		10		5399-2902 N2



Pigment lance

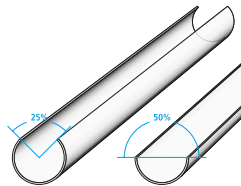


Pigment lance to sample pigments, pastes and agglomerating bulk goods.

- ▶ With half-open flute 50 %, for heavily sticking products
- ▶ With quarter-open flute 25 %, for lightly sticking products
- ▶ Stainless steel V4A (1.4404)
- ▶ 30 mm Ø

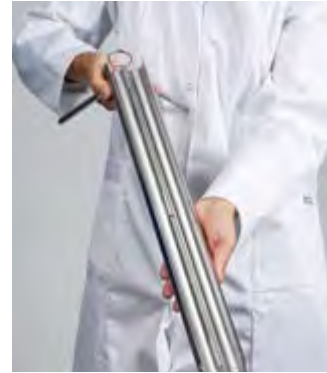
Use

1. Insert the lance to the required depth.
2. Turn the handle, the sample is collected into the open flute.
3. Pull back the lance.
4. Take out the sample.



Pigment lance							
Flute length mm	Flute openings %	Volume ml	Total length mm	Price €	Item no.		
300	25	145	432		5369-0300	N4	
300	50	85	432		5369-0310	N4	
600	25	312	732		5369-0600	N4	
600	50	179	732		5369-0610	N4	
900	25	480	1032		5369-0900	N4	
900	50	273	1032		5369-0910	N4	

Valve lance



Sampler for all-layer samples of viscous, paste-like, semi-liquid substances, according to DIN 51750 pt. 3 and DIN EN ISO 15528. Different layers remain intact particularly with paste-like substances.

- ▶ Stainless steel V4A (1.4404)
- ▶ 32 mm Ø
- ▶ Optimised opening mechanism (can be completely disassembled) for easy cleaning

Use

For viscous substances:

1. The valve lance is inserted all the way to the bottom, whilst being closed.
2. It is opened, closed and pulled out again.

For paste-like substances:

1. The valve lance is inserted all the way to the bottom, whilst being open.
2. It is closed and pulled out again.

Valve lance					
Length mm	Price €	Item no.			
550		5359-1600 N4			
800		5359-1800 N4			
Accessories					
Description	Price €	Item no.			
Transport case LxWxH 121x22,5x11 cm		3600-2120 N4			

QualiRod conical



Conical hand-drill, conically shaped, with sharp cutting edges and a solid handle. Ideal for cutting out samples for quality control from soft, paste-like substances (cheese, butter, clay, soap, wax, etc.).

- ▶ Stainless steel V2A (1.4301)
- ▶ Sterilisable
- ▶ According to EN/ISO 707

QualiRod conical				
Drilling depth mm	Price €	Quantity scale from	Scale price €	Item no.
120		5		5311-0001 N4
170		5		5311-0002 N4
Accessories				
Description	Price €			Item no.
Transport case, inner dimensions 258x178x45 mm close-it ^{food} control seals page 88				3600-0021 N3

QualiRod cylindrical



Cylindrical hollow drill with a sharp cutting edge, can easily be driven into paste-like and semi-solid substances. The samples cut out are subsequently removed with the appropriate push-rod ejector. Total length 260 mm. Inner Ø 8 mm, outer Ø 10 mm.

- ▶ Stainless steel V2A (1.4301)
- ▶ Sterilisable
- ▶ Inner Ø 8 mm, outer Ø 10 mm

QualiRod cylindrical				
Drilling depth mm	Price €	Quantity scale from	Scale price €	Item no.
200		5		5311-0101 N4
Accessories				
Description	Price €			Item no.
Transport case, inner dimensions 258x178x45 mm				3600-0021 N3

Spatula



Universal instrument for collecting, dividing and mixing pastes, creams etc.

- ▶ Blade made of stainless steel V2A (1.4301)
- ▶ Wooden handle

Spatula

Length mm	Price €	Quantity scale from	Scale price €	Item no.
180		10		5313-0180 N4
300		10		5313-0300 N4

Bürkle – A look behind the scenes

There are many ways or ordering at Bürkle – but all roads lead to the Sales department.



Are you late again?
www.buerkle.de –
You can reach us around the clock!

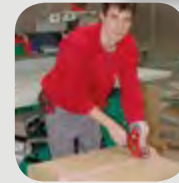
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Are you in a hurry?
We also offer express deliveries.



By the way: If your product is in stock and you order before 1.00 p.m., the package leaves our store the same day.

Stainless steel scoop



In contrast to conventional scoops, the stainless steel scoop has no openings, undercuts or crevices in which residues could collect. Pore-free finishing produced by high-quality laser welding seams. The stainless steel scoop can be flame-sterilised and can therefore be made completely germ-free.

- ▶ Scoop made of stainless steel V2A (1.4301), complete with rod
- ▶ Sterilisable by flame sterilisation or steam sterilisation

Stainless steel scoop

Total length cm	Capacity ml	Price €	Item no.
115	1000		5354-1000 N4

Mini ViscoSampler | for small quantities



Sampler for viscous substances such as pastes, mud, creams, oils. The sample is drawn in using the pump rod and directly conveyed to the sampling container. Easy cleaning for flawless sampling. Depending on the viscosity, the removable suction tip can be fitted with suction drills of 2 mm to 6 mm.

- ▶ Stainless steel V4A (1.4404), seals PTFE
- ▶ Sterilisable
- ▶ Ideal for the pharmaceutical and cosmetics industry
- ▶ Incl. suction tip 2 mm
- ▶ 15 mm Ø

Mini ViscoSampler

Length cm	Chamber volume ml	Price €	Quantity scale from	Scale price €	Item no.
60	30		5		5341-1060 N4
100	50		5		5341-1100 N4
150	75		5		5341-1150 N4

Accessories

Description	Price €	Item no.
Suction heads for Mini ViscoSampler, suction drill 2 mm		5341-1002 N4
Suction heads for Mini ViscoSampler, suction drill 4 mm		5341-1004 N4
Suction heads for Mini ViscoSampler, suction drill 6 mm		5341-1006 N4
Drain safety stand (see page 57)		5618-1000 N4

ViscoSampler | sample collector for medium viscosity substances



ViscoSampler with powerful suction for viscous media. The media is drawn up and discharged using the suction flask. Made of ultra-pure, chemically inert PTFE/FEP for contamination-free sampling.

Specially developed for viscous substances such as slurries, silt, wet clay and soil samples, soil sediments, oils, emulsions, creams etc.

Colour-coded handles to prevent mix-up, available as optional accessories.

Easy cleaning - all surfaces are poreless and without crevices. Dirt accumulation is prevented. Only round screw threads tried and tested in the field of food hygiene are used. Disassembly and cleaning are extremely simple.



QualiSampler set

The handy set, which comes complete with carrying case, combines the LiquiSampler and the ViscoSampler with practical accessories.

Models in PP or PTFE/ FEP.

- ▶ QualiSampler set consisting of:
- ▶ LiquiSampler, 100 cm
- ▶ ViscoSampler, 100 cm
- ▶ Case, five bottles, cleaning brush

ViscoSampler

Material	Volume ml	Immersion depth cm	Dia. mm	Price €	Item no.
PP, transparent	160	60	32		5331-1060 N4
PP, transparent	300	100	32		5331-1100 N4
PP, transparent	650	200	32		5331-1200 N4
PTFE/FEP, transparent	160	60	32		5331-2060 N4
PTFE/FEP, transparent	300	100	32		5331-2100 N4
PTFE/FEP, transparent	650	200	32		5331-2200 N4



Accessories

Description	Price €	Item no.
Handles ViscoSampler set in blue, green, yellow, white and black		5331-0020 N4
Cleaning brushes 25 mm dia., length 100 cm		5304-0100 N4
Drain safety stand (see page 57)		5618-1000 N4

QualiSampler set

Material	Price €	Item no.
PP		5330-1000 N4
PTFE / FEP		5330-1001 N4

LiquiSampler | sample collector for liquids



LiquiSampler for liquids, according to DIN EN ISO 15528. Made of ultra pure and chemically inert PTFE/FEP or PP for contamination-free sampling.

Sampling from open and closed containers, barrels, tanks, silos, water courses. Suitable for all commercially available barrels and containers with opening of at least 32 mm in diameter.

Push-buttons colour-coded to prevent mix-up, available as optional accessories.

Easy cleaning - all surfaces are free of pores and crevices, preventing accumulation of dirt. Only round screw threads proven in foodstuffs hygiene are used. Disassembly and cleaning are extremely simple.

- ▶ Practical one-handed use at the push of a button
- ▶ With scraping ring for marking of depth and cleaning
- ▶ Transparent
- ▶ Available in PTFE/ FEP or PP transparent
- ▶ Point sampling, all-layer and soil samples possible

Use

All-layer sample

1. Slowly insert the LiquiSampler into the liquid with the button pressed.
2. Release the push-button, the valve closes.
3. Withdraw the lance and take out the sample.

Point sampling/soil sample

1. Insert the LiquiSampler to the targeted point/to the ground with closed valve.
2. Press the button - the liquid flows in.
3. Release the push-button, the valve closes.
4. Pull out the LiquiSampler, take out the sample.



LiquiSampler					
Material	Volume ml	Immersion depth cm	Dia. mm	Price €	Item no.
PP, transparent	150	60	32		5330-1060 N4
PP, transparent	250	100	32		5330-1100 N4
PP, transparent	500	200	32		5330-1200 N4
PTFE/FEP, transparent	150	60	32		5330-2060 N4
PTFE/FEP, transparent	250	100	32		5330-2100 N4
PTFE/FEP, transparent	500	200	32		5330-2200 N4
Accessories					
Description			Price €	Item no.	
Push-buttons for set LiquiSampler in blue, green, yellow, white and black				5330-0149 N4	
Cleaning brushes 25 mm dia., length 100 cm				5304-0100 N4	

Dip Sampler, plunging siphon



Dip sampler for simple removal of liquid samples. Good view due to transparent tubes. Upper end with reflux valve, lower end with ball valve.

- ▶ PP, transparent
- ▶ Dip sampler, item no. 5315-0200, steplessly extendable from 100 cm to 200 cm
- ▶ All-layer and point sampling possible

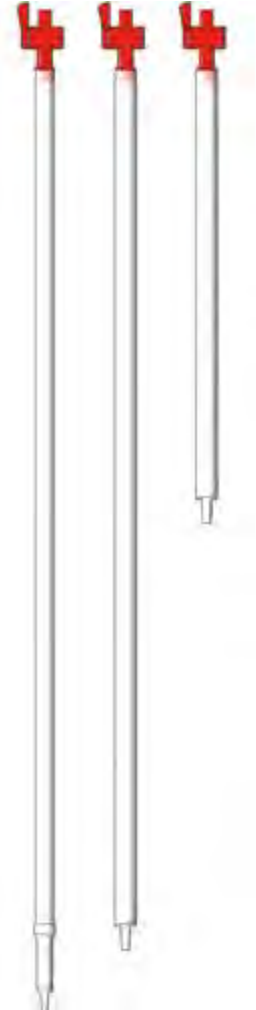
Use

All-layer sample

1. Insert the dip sampler slowly into the liquid with the valve open.
2. Close valve.
3. Pull the dip sampler back and take out the sample.

Point sampling/soil sample

1. Insert the dip sampler to the targeted point/to the ground with closed valve.
2. Open the valve - the liquid flows in.
3. Close the valve.
4. Pull out the dip sampler, take out the sample.



Dip Sampler, plunging siphon

Volume ml	Immersion depth cm	Tube Ø mm	Price €	Quantity scale from	Scale price €	Item no.
140	50	25		5		5315-0050 N4
280	100	25		5		5315-0100 N4
500	100 - 200	25		5		5315-0200 N4

Disposable plunging siphon



If strongly adhesive liquids are sampled, it can be a lot less expensive to dispose of the sampler than to carry out a complicated cleaning process. The disposable dip sampler were developed especially for this purpose. They are made of PE, transparent and the contents are easily visible. PE provides a surface that resists adhesion of the sample material, minimising sample retention on the dip sampler.

Use

1. Insert the dip sampler into the liquid and fill it.
2. Close the thumbhole above the handle using your thumb.
3. Take out the dip sampler and empty the liquid into the sample bottle.

Disposable plunging siphon

Volume ml	Immersion depth cm	Total length cm	Tube Ø mm	Price €	Quantity scale from	Scale price €	Item no.
75	35	50	27		12		5387-0050 N4
175	60	75	27		12		5387-0075 N4
275	85	100	27		12		5387-0100 N4

PTFE Scoop



All parts coming into contact with the sample medium are made of pure white PTFE. Completely inert against all substances (with the exception of elementary fluoride). The rod is stabilised with a steel core which is completely encapsulated in PTFE. The 60 cm long rod can be extended to 120 cm by adding another component. The scoop PTFE with 10 ml has a strong rod with a length of 155 mm.

PTFE Scoop

Capacity ml	Dia. mm	Height mm	Price €	Item no.
10	25	34		5389-0010 N2
100	55	65		5389-0100 N2
250	70	95		5389-0250 N2
500	80	125		5389-0500 N2
1000	105	155		5389-1000 N2

Accessories

Description	Price €	Item no.
Extension for PTFE scoop, 60 cm		5389-0001 N2

Chemistry scoop



Scoop for aggressive liquids, complete with strong handle, entirely made of polypropylene.

- ▶ Rod length 100 cm, Ø 20 mm
- ▶ Without metal parts

Chemistry scoop



Capacity ml	Price €	Quantity scale from	Scale price €	Item no.
250		10		5353-0250 N4
600		10		5353-0500 N4
1000		10		5353-1000 N4

Stainless steel scoop



In contrast to conventional scoops, the stainless steel scoop has no openings, undercuts or crevices in which residues could collect. Pore-free finishing produced by high-quality laser welding seams.

The stainless steel scoop can be flame-sterilised and can therefore be made completely germ-free.

- ▶ Scoop made of stainless steel V2A (1.4301), complete with rod
- ▶ Sterilisable by flame sterilisation or steam sterilisation

Stainless steel scoop



Total length cm	Capacity ml	Price €	Item no.
115	1000		5354-1000 N4

Liquid-Sampler | single hand operation

Sampler for thin to viscous liquids. Easy use with one-handed operation. With discharge funnel for safe filling of the sample bottles. Material V4A (1.4404).



The valve is opened with the thumb to empty the sample.



The valve is opened by attaching the sample container to empty the sample.



Liquid-Sampler, open with thumb

Total length cm	Container dia. mm	Capacity ml	Price €	Quantity scale from	Scale price €	Item no.	
46	32	50		5		5326-0001	N4
54	32	100		5		5326-0002	N4

Liquid-Sampler, place onto bottle

Container dia. mm	Total length cm	Capacity ml	Price €	Quantity scale from	Scale price €	Item no.	
32	45,5	50		5		5326-0003	N4
32	53,5	100		5		5326-0004	N4

TeleScoop | for industry and water treatment



② **Angular beaker**
The beaker is adaptable to different container shapes by adjustable angle setting (up to 90°).

▶ Polypropylene



③ **Pendulum beaker PP**
This beaker automatically swings to a horizontal position. Nothing can be spilt. Suitable therefore for deep and narrow shafts (Ø 150 mm).

▶ Polypropylene



④ **Pendulum beaker stainless steel**
This beaker automatically swings to a horizontal position. Nothing can be spilt. Suitable therefore for deep and narrow shafts (Ø 130 mm).

▶ Stainless steel V2A (1.4301)

① **Telescopic rod**

Different tools can be attached to the telescopic rod (snap-in joint). The individual rods have been provided with an end stop. This means that one rod cannot accidentally slip out of another rod. The telescopic rods cannot be rotated radially, which means even better handling!

Telescopic rod 5355-0280, extremely short model - yet extendable up to 280 cm. Fits into every car boot!

- ▶ Increased telescopic rod rigidity by using cold-rolled profile rod
- ▶ Springs made of stainless steel

TeleScoop is a versatile sampling system with exchangeable tools for a wide range of applications. The tools (angular beaker, pendulum beaker, bottle holder, stainless steel beaker and dip net) are attached to the telescopic rod by a practical snap-in joint.

Ideal for sampling from baths, tanks, shafts, open water courses etc. Sampling depths down to 6 m can be reached with the adjustable telescopic aluminum rod.

- ▶ For industry and water treatment

TeleScoop | for industry and water treatment



⑤ Bottle holder
Holds all bottles up to 88 mm Ø. Plastic, glass or metal bottles can be securely filled in this way. Angle steplessly adjustable up to 90°.

- ▶ With universal quick tightening strap
- ▶ Polypropylene/PA



⑥ Stainless steel beaker
Beaker with scraper, contents 1000 ml. Ideal for powder, granules, pastes, mud.

- ▶ Sterilisable
- ▶ Stainless steel V2A (1.4301)



⑦ Surface catch net
Catch net for taking solid and organic samples from water courses.

- ▶ PVC/PA blue
- ▶ L 310 x W 280 mm
- ▶ Mesh width 2 - 5 mm



⑧ Depth catch net
Catch net for taking solid and organic samples from water courses.

- ▶ PP/PA blue
- ▶ L 190 x W 430 mm
- ▶ Net depth 250 mm
- ▶ Mesh width 2 - 5 mm



① Telescopic rod

Length infinitely variable from	No. of rods	Price €	Quantity scale from	Scale price €	Item no.
65-120 cm	2		10		5355-0120 N4
70-180 cm	4		10		5355-0180 N4
125-250 cm	2		10		5355-0250 N4
95-280 cm	4		10		5355-0280 N4
115-300 cm	3		10		5355-0300 N4
165-450 cm	3		10		5355-0450 N4
175-600 cm	4		10		5355-0600 N4

Model	Capacity ml	Price €	Quantity scale from	Scale price €	Item no.
② Scoop angular beaker	600		10		5354-0050 N4
② Scoop angular beaker	1000		10		5354-0100 N4
② Scoop angular beaker	2000		10		5354-0200 N4
③ Pendulum beaker PP	600		10		5354-5050 N4
③ Pendulum beaker PP	1000		10		5354-5100 N4
③ Pendulum beaker PP	2000		10		5354-5200 N4
④ Pendulum beaker V2A	1000		5		5354-3000 N4
⑤ Bottle holder	750		10		5354-4100 N4
⑥ Stainless steel beaker	1000		5		5354-2000 N4
⑦ Surface catch net			5		5354-5020 N4
⑧ Depth catch net			5		5354-5010 N4

Sampler Liquid CupSampler



It is possible to carry out point sampling of liquids of varying viscosity with the stainless steel Liquid CupSampler (V4A). Media-containing particles can also be sampled without difficulty. The sampler can be used in the fields of chemistry, foodstuffs and cosmetics. The cup can be unscrewed from the stem, allowing easy cleaning.

Use

1. Place the collector at the desired depth.
2. Open the lid using the handle. The liquid flows in.
3. Close the filled collector and remove it.
4. Empty the sample into the sample bottle.

Sampler Liquid CupSampler

Capacity ml	Container dia. mm	Total length cm	Price €	Item no.
100	55	100		5357-0001 N4



ChemoSampler | for acids, alkalis, detergents



The ChemoSampler was developed for sampling aggressive liquids, e.g. acids, alkalis, detergents. The samples are drawn directly into the screw-on original sampling bottle. The tamper-proof bottle closure of these bottles with original safety ring ensures unadulterated sample transport. Samples can be taken from depths of as much as 200 cm, e.g. from tanks, silos or tankers, by using the extension rod.

- ▶ PP, grey
- ▶ Resistant to acids and alkalis
- ▶ Incl. sample bottle 1000 ml
- ▶ Extension rod 100 cm and two bottle sizes available as accessories.

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

ChemoSampler

Price €	Quantity scale from	Scale price €	Item no.
	5		5336-1000 N4

Accessories

Description	Price €	Item no.
Extension for ChemoSampler 100 cm		5336-0100 N4
Sampling bottle PE, 500 ml		0342-0500 N3
Sampling bottle PE, 1000 ml		0342-1000 N3

MiniSampler | taking samples – comfortable, quick and clean sampling



With the vacuum sampler MiniSampler, the sample liquid only comes into contact with the suction hose and the original sample bottle. The possibility of cross-contamination is greatly reduced. Immediately after taking the sample, the bottles are sealed. The disposable suction hose can quickly be replaced. This guarantees that the samples are never contaminated. If necessary, a new hose can be used for every single sample.

Due to its small diameter (8 mm), the hose can reach narrow, seemingly inaccessible sampling areas.

Two models:

PE MiniSampler for general sampling, max. suction height 5 m*

PTFE MiniSampler for ultra-pure sampling, max. suction height 5 m*

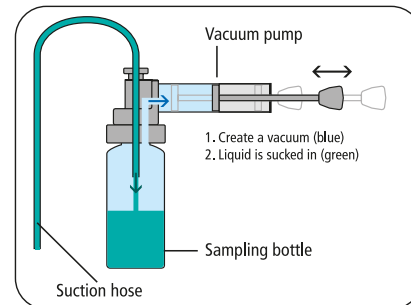
* depending on the medium

- ▶ Also suitable for viscous oils
- ▶ Complete in a handy transport case

Use

1. Insert the hose and the bottle into the pump.
2. Insert hose end to desired sample depth.
3. Move the pump piston back and forth and collect the sample.
The liquid flows directly into the bottle.
4. Take off the filled bottle, close and label it.

Not for aggressive acids. Vapors could destroy pump.



MiniSampler PE | for general sampling



Ideal for general sampling from barrels, canisters, tanks etc.
MiniSampler PE complete with accessories in transport case, contents: Vacuum pump, 10 PE bottles, 100 ml, 10 m PE suction hose 6 x 8 mm, 1 hose cutter, 1 stainless steel hose weight made of V2A (1.4301), 20 seal-it bottle seals.

MiniSampler PTFE | for ultrapure sampling



Ideal when maximum purity is needed.
MiniSampler PTFE complete with accessories in its transport case, contents: Vacuum pump, 1 sample bottle PFA 180 ml, 5 m PTFE suction hose 6 x 8 mm, 1 hose cutter, 1 stainless steel hose weight made of V2A (1.4301), 20 seal-it bottle seals.

MiniSampler PE

Price €	Quantity scale from	Scale price €	Item no.
	5		5305-0100 N4

Accessories

Description	Price €	Item no.
MiniSampler pump with adapter PP		5305-0010 N4
MiniSampler standard pump		5305-0011 N4
PTFE MiniSampler adapter for glass thread GL 45		5305-0209 N4
MiniSampler adapter PTFE for sample tubes PFA 6205-0090, 6202-0180		5305-1020 N2
Hose cutter		0006-9506 N3
Sampling bottle HDPE, 100 ml		0340-0100 N3
Sampling bottle HDPE, 250 ml		0340-0250 N3
Sampling bottle HDPE, 500 ml		0340-0500 N3
Sampling bottle HDPE, 1000 ml		0340-1000 N3
Suction hose PE on roll 6 x 8 mm, roll with 10 m		8805-0608 N3
Suction hose PE on roll 6 x 8 mm, roll with 100 m		8878-0608 N3

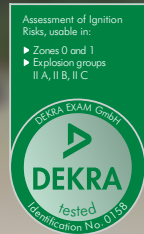
MiniSampler PTFE

Price €	Quantity scale from	Scale price €	Item no.
	5		5305-0110 N4

Accessories

Description	Price €	Item no.
MiniSampler pump with adapter PP		5305-0010 N4
MiniSampler standard pump		5305-0011 N4
PTFE MiniSampler adapter for glass thread GL 45		5305-0209 N4
MiniSampler adapter PTFE for sample tubes PFA 6205-0090, 6202-0180		5305-1020 N2
Hose cutter		0006-9506 N3
Sample boxes PFA, 90 ml		6205-0090 N3
Sample boxes PFA, 180 ml		6205-0180 N3
Suction hose PTFE on roll 6 x 8 mm, roll with 5 m		8804-0608 N3

ProfiSampler | vacuum-operated sample collector for robust industrial use



①

Profi Sampler Aluminium



①

While the MiniSampler is designed for laboratory use, the ProfiSampler has been specially developed for rough industrial use.

Applications

Sampling liquids in barrels, tanks, lorries, railway goods wagons, ships, water courses, ground water, etc.

Vacuum samplers have the advantage that the sample liquid only comes into contact with the suction hose and the original sample bottle. The possibility of cross-contamination is greatly reduced. Immediately after taking the sample, the bottles are sealed. The disposable suction hose can quickly be replaced. This guarantees that the samples are always authentic. If necessary, a new hose can be used for every single sample.

Due to its small diameter (8 mm), the hose can reach narrow, seemingly inaccessible sampling areas.

The ProfiSampler can be extended with useful accessories developed in practice.

⚠ Attention! Make sure to pay attention to the "List of Chemical Resistance"!

- ▶ Three feet guarantee that the ProfiSampler stands safely.
- ▶ Fill level control, automatic return flow and overflow protection through built-in venting valve.
- ▶ Available with suction hose in PE, PA and PTFE wherever the highest degree of purity is required
- ▶ Can be supplied with straight suction tubes for simpler sampling, incl. transport case for tidy transport and disposal of the suction tubes
- ▶ Suction volume 200 ml, suction pressure 0.5 bar
- ▶ Suction height from liquid surface 5 m WS
- ▶ Sample bottles available in different materials and sizes

ProfiSampler | vacuum-operated sample collector for robust industrial use

① **ProfiSampler Aluminium** for solvents and flammable liquids in Explosion Categories IIA, IIB and IIC. With bottle thread GL 45 (suitable for Schott glass bottles 100 ml to 1000 ml).

When taking samples of flammable liquids, the device must be earthed. For this, earthing cable and, possibly in addition, anti-static set should be used, see accessories.

ProfiSampler aluminium, consisting of: Vacuum pump made of aluminium, with feet, venting valve and bottle thread GL 45 with glass bottle 500 ml, 5 suction tubes PA black, 220 cm long, electrically conductive, hose cutter, brass hose weight, 20 seal-it bottle seals, earthing cable.

② **Profi Sampler PP** for general samples, for weak acids, alkalis, detergents, chemical baths. Made of solid, chemical resistant Polypropylene.

ProfiSampler PP, consisting of: Vacuum pump, made of solid PP, with feet, venting valve and bottle thread GL 45, 1 PP bottle 250 ml, 10 m PE suction hose (roll), 1 hose cutter, 1 stainless steel hose weight made of V2A (1.4301), 20 seal-it bottle seals.



③ **Straight suction tubes** (PE or PA) have the advantage that they are not slightly bent as is the standard tubing (from the roll) and can therefore be immersed absolutely vertically into the container. The suction tubes are available in transparent PE for general sampling and black PA for flammable liquids in VbF Hazard Category AI (electrically conducting). Diameter 6 x 8 mm. Contamination banned! In practice the low-priced tubes are only used once. They are then disposed of, instead of being subjected to a costly cleaning process. The tubes are not autoclavable.

④ **Transport case for straight suction tubes** for the practical transport of new suction tubes and the safe storage of used ones. Suitable for 100 suction tubes, 220 cm long.

① ProfiSampler Aluminium					
Price €	Quantity scale from	Scale price €	Item no.		
	5		5305-1100 N4		

Accessories		
Description	Price €	Item no.
Glass sampling bottle 100 ml, GL 45		5314-0010 N3
Glass sampling bottle 250 ml, GL 45		5314-0025 N3
Glass sampling bottle 500 ml, GL 45		5314-0050 N3
Glass sampling bottle 1000 ml, GL 45		5314-0100 N3
③ Straight suction tube, PE transparent, 200 cm, 10 pieces		5305-1022 N4
③ Straight suction tube, PA black, electrical conductive, 220 cm, 10 pieces		5305-1024 N4
④ Transport case for straight suction tubes		5305-1029 N4
Anti-static set		5602-1000 N4
Suction hose PE on roll 6 x 8 mm, roll with 10 m		8805-0608 N3
Suction hose PE on roll 6 x 8 mm, roll with 100 m		8878-0608 N3
Suction hose PTFE on roll 6 x 8 mm, roll with 5 m		8804-0608 N3

② Profi Sampler PP					
Price €			Item no.		
			5305-1000 N4		

Accessories		
Description	Price €	Item no.
③ Straight suction tube, PE transparent, 200 cm, 10 pieces		5305-1022 N4
③ Straight suction tube, PA black, electrical conductive, 220 cm, 10 pieces		5305-1024 N4
④ Transport case for straight suction tubes		5305-1029 N4
Sampling bottle PP, 250 ml		0319-0250 N3
Suction hose PE on roll 6 x 8 mm, roll with 10 m		8805-0608 N3
Suction hose PE on roll 6 x 8 mm, roll with 100 m		8878-0608 N3

Liqui zone samplers



Up to three point samples from different depths of a liquid can be taken with the Bürkle zone sampler for liquids.

If particles separate in liquids or emulsions, if the components de-mix or they form different layers, then sampling from various depths and areas is necessary to obtain a representative sample.

With the handy carrying case, the samples can be emptied directly into the sample bottles.

The Liqui zone sampler can be easily cleaned, it has good chemical resistance and is suitable for food, because the medium only comes into contact with the hose. The suction hoses made of PE or PTFE can be adjusted to the required length and can be replaced any time as cost-effective accessories.

The sampling device is ideal for use with barrels, tanks, wells, waste water plants and water purification plants.



Attention! Make sure to pay attention to the "List of Chemical Resistance"!



Liqui zone sampler electric

The electrical version of the Liqui zone sampler is equipped with a drive unit powered by re-chargeable batteries. This provides flexibility and means independence from the mains power.

The electrical operation guarantees fast and comfortable sampling of larger quantities. Three peristaltic pumps draw in the medium. The pumps are also suitable for media containing particles. A suction depth of five metres can easily be reached this way. The delivery rate of each pump is 2 l/min.

- ▶ Suction height up to 5 m
- ▶ Delivery rate 2 l/m

Liqui zone sampler electric

Price €

Item no.

5329-2000 N4



Liqui zone sampler manual

The manual zone sampler for liquids is operated with a vacuum pump.

If the earthing cable is used, the Liqui zone sampler can also be used for flammable liquids.

The vacuum pump can reach suction of 0.5 bar and therefore has a suction height of about 4 metres.

- ▶ Suction height up to 4 m
- ▶ Suction pressure 0.5 bar

Liqui zone sampler manual

Price €

Item no.

5329-1000 N4



UniSampler with hose



UniSampler with PVC hose and hose weight made of stainless steel. For deep, hard-to-reach places. The mass of the metal tube drags the hose to any depth.

- ▶ Suction hose PVC, 2.50 m long
- ▶ Complete in a handy transport case incl. sample bottle PP 1000 ml, vacuum pump, universal bottle adapter, hose weight made of V2A, 20 seal-it bottle seals
- ▶ Universal bottle adapter made of PVC, for bottle necks Ø 24 mm, 32 mm, 39 mm and 50 mm nominal dimension, for sample bottles 100 - 1000 ml

Use

1. Lower the suction hose to the required depth.
2. Attach the adapter to the sampling bottle.
3. Create a vacuum using the handpump and collect the sample.
4. Remove the filled sample bottle, close and label it.

UniSampler with hose			
Price €	Quantity scale from	Scale price €	Item no.
	5		5314-2000 N4
Accessories			
Description	Price €	Item no.	
Suction hose for replacement PVC, 2,5 m		5314-2002	N4
Sampling bottle PP, 100 ml		0319-0100	N3
Sampling bottle PP, 250 ml		0319-0250	N3
Sampling bottle PP, 500 ml		0319-0500	N3
Sampling bottle PP, 1000 ml		0319-1000	N3

UniSampler "Ex"



Sampler especially developed for sampling flammable liquids of Hazard Category AI (VbF, e.g. fuel). Glass bottle and hose are connected in such a way that they conduct electricity and are earthed via an earthing cable.

- ▶ Complete in a handy transport case incl. 4m hose (NBR), glass bottle 1000 ml, bottle adapter, vacuum pump, earthing cable and hose-weight made of brass
- ▶ PTB approval D-333-009 618/00

Use

1. Earth the device.
2. Lower the suction hose to the required depth.
3. Attach the adapter to the sampling bottle.
4. Create a vacuum using the handpump and collect the sample.
5. Remove the filled sample bottle, close and label it.

The UniSampler "Ex" was developed in co-operation with the quality association Tankschutz e.V. (non-profit association for tank protection).

UniSampler "Ex"			
Price €	Quantity scale from	Scale price €	Item no.
	5		5314-3000 N4
Accessories			
Description	Price €	Item no.	
Glass sampling bottle 1000 ml, GL 45		5314-0100	N3

UniSampler with suction lance



Use

1. Set the desired sampling depth by moving the suction lance.
2. Attach the adapter to the sampling bottle.
3. Lower the suction lance into the medium.
4. Create a vacuum using the hand-pump and collect the sample.
5. Remove the filled sample bottle, close and label it.

The collection lance consists of an inner tube and an outer tube. The suction position can be varied steplessly with the outer tube within a height of 0 to 48 cm. The total length of the telescopic suction tube is 100 cm.

- ▶ Suction tube PP, suction hose PVC
- ▶ Incl. 5 sample bottles each PP 250 ml and 500 ml, vacuum pump, universal adapter for sample bottles, 20 seal-it bottle seals
- ▶ Universal bottle adapter made of PVC, for bottle necks Ø 24 mm, 32 mm, 39 mm and 50 mm nominal dimension, for sample bottles 100 - 1000 ml

UniSampler with suction lance

Price €	Quantity scale from	Scale price €	Item no.
	5		5314-1000 N4

Accessories

Description	Price €	Item no.
Sampling bottle PP, 100 ml		0319-0100 N3
Sampling bottle PP, 250 ml		0319-0250 N3
Sampling bottle PP, 500 ml		0319-0500 N3
Sampling bottle PP, 1000 ml		0319-1000 N3

Bürkle photo studio



A good photo is a photo that you look at for more than one second.
Henri Cartier-Bresson



Did you know that practically all the product photos in this catalogue were created in our in-house photo studio? For application pictures, our staff even take on the role of photo model – so that you can get a realistic impression of our products.



Are you a keen photographer?

... then take one of the Bürkle products in day-to-day use as a subject!

We look forward to receiving your practical application photo!



Vampire Sampler | for sampling liquids in the field



Transportable, hose pump for liquids, independent of mains power. Ideal for sampling from barrels, tanks, wells, water separators and sewage and purification systems.

Vampire is packed in a handy transport case with: drive unit (12 V), two re-chargeable batteries, battery charger, bottle holder, bottle LDPE 250 ml, hose pump and 5 m hose made of PE.

- ▶ Easy cleaning, liquid is only in contact with the hose
- ▶ Independent of mains power with re-chargeable batteries and charger, incl. replacement battery
- ▶ Sampling directly into the original sample bottle
- ▶ Suction height up to 5 m
- ▶ Also suitable for contaminated substances or media containing particles
- ▶ Good chemical resistance
- ▶ Good delivery rate up to 2.0 l/min



Vampire Sampler



Price €	Quantity scale from	Scale price €	Item no.
	5		5327-1000 N2

Accessories

Description	Price €	Item no.
Suction hose Marprene, 1m		5327-0508 N2
Basket for sample bottles, 500 ml, incl. holding ring		5302-2050 N2
Sampling bottle LDPE 500 ml		0318-0500 N3
Suction hose PE on roll 6 x 8 mm, roll with 10 m		8805-0608 N3
Suction hose PE on roll 6 x 8 mm, roll with 100 m		8878-0608 N3

Dipping bottles



Dipping containers are used in various areas to collect liquids for sampling. Bürkle produces the most comprehensive collection of dipping containers by a long way, the right product for every use as it were. Bürkle offers dipping bottles and immersion cylinders for sediments, for the area of environmental issues, for chemically aggressive products, for petrochemistry, for the ex protection area etc. The dipping bottles for the Ex protection area are made of nickel-plated brass, therefore they do not oxidise.

Dipping vessels can be used for point sampling, all-layer samples and soil samples. Dipping vessels are heavy. Lowering requires the use of special manually-operated drum reels with a large winding diameter. Other manually-operated drum reels place too much strain on the user's wrist and could represent a health hazard. Lowering cables and chains made from different materials, as well as manually-operated drum reels, also for Ex-proof applications, available as accessories.

! Observe Ex-proof guidelines when sampling flammable liquids. Only use conductive lowering cables made of nonspark-producing material and conductive hand reels with grounding connection.

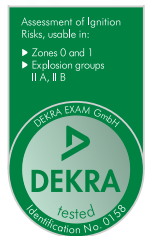
Dipping bottle

Dipping bottle with glass container for sampling in sewage plants, for mud and water samples. For testing crude oil, liquid mineral oil products, fuels, special and test fuels, fuel oils, petroleum and liquid lubricants of Hazard Categories IIA and IIB. Completely made from non-spark producing materials. Dipping frame made of nickel-plated brass, easy-click closure made of electrically conductive polyamide.

- ▶ With Easy-Click, safe and practical closure for a rapid bottle exchange
- ▶ High weight (3.3 kg) for fast lowering
- ▶ Bottle made of transparent glass 1000 ml contents
- ▶ Height with handles 330 mm
- ▶ Please order the appropriate lowering cable at the same time (page 120)
- ▶ Tested for use in the Ex protection zone 0

Use

1. Lower the dipping bottle to the required depth.
2. Pull chain/cable with a short, powerful jerk, the stopper opens.
3. The sample flows into the bottle.
4. Raise the bottle with the chain/cable.
5. Open the Easy-Click, remove the bottle.



Dipping bottle

Capacity ml	Dia. mm	Price €	Item no.
1000	148		5365-4000 N4



Dipping bottle Ex

Dipping bottle for testing mineral oil products Category A, Explosion Categories IIA, IIB and IIC, crude oil, liquid mineral oil products, fuels, special and test fuels, fuel oils, petroleum and liquid lubricants. Completely made from non-spark producing materials, nickel-plated

- ▶ Screw-off bottle head - easy cleaning.
- ▶ Robust handle
- ▶ High weight (3.2 kg) for fast lowering
- ▶ 1000 ml contents
- ▶ Height with handles 443 mm
- ▶ Please order the appropriate lowering cable at the same time (page 120)
- ▶ Tested for use in the Ex protection zone 0



Use

1. Lower the dipping bottle to the required depth.
2. Pull chain/cable with a short, powerful jerk, the stopper opens.
3. The sample flows into the bottle.
4. Raise the bottle with the chain/cable.
5. Open the closure, empty the bottle.

Dipping bottle Ex

Capacity ml	Dia. mm	Price €	Item no.
1000	89		5365-3000 N4



Immersion cylinder

Immersion cylinder for sampling crude oil, liquid mineral oil products, fuels, special and test fuels, fuel oils, petroleum and liquid lubricants in Explosion Categories IIA, IIB and IIC. Completely made from non-spark producing materials, nickel-plated.

- ▶ Screw-off top enables easy cleaning.
- ▶ High weight (4.1 kg) for fast lowering
- ▶ Robust handle
- ▶ 1000 ml contents
- ▶ Height with handles 438 mm
- ▶ Please order the appropriate lowering cable at the same time (page 120)
- ▶ Tested for use in the Ex protection zone 0

Use

Point sampling

1. Two lowering cables are required for this (bearer cable and hauling cable).
2. Lower the immersion cylinder to the required depth.
3. When the target has been reached, pull on the hauling cable, the valve opens.
4. The sample flows into the bottle.
5. Release the hauling cable. The valve closes. Pull the cylinder back on the bearer cable.
6. Empty the cylinder via the valve at the bottom.

Soil sample

1. Lower the immersion cylinder on the cable to the ground.
2. The valve opens automatically because of the immersion cylinder's own weight.
3. The sample flows into the cylinder.
4. Pull the cylinder back on the cable, the valve closes independently.
5. Empty the cylinder via the valve at the bottom.

Immersion cylinder

Capacity ml	Dia. mm	Price €	Item no.
1000	75		5365-7000 N4



Dipping vessel

Dipping vessel for taking all-layer samples from tanks, tank wagons, water courses, water purification plants.

- ▶ With Easy-Flow, the flow optimised flow valve
- ▶ High weight (2.1 kg) for faster lowering
- ▶ Contents 1000 ml
- ▶ Height with handles 427 mm
- ▶ Made of non-spark producing brass or stainless steel V2A (1.4301) for Ex area
- ▶ Please order the appropriate lowering cable at the same time (page 120)
- ▶ Tested for use in the Ex protection zone 0
- ▶ Explosion Categories IIA, IIB and IIC



Use

1. When the dipping vessel is lowered, the liquid constantly runs through it.
2. When it is pulled back, both valves close automatically.
3. Emptying at the top via the open flaps.

Dipping vessel						
Material	Dia. mm	Price €		Item no.		
brass	82			5365-1000	N4	
stainless steel AISI 304	82			5365-2000	N4	

Mini immersion cylinder

For sampling liquids in narrow places where access is difficult. Can also be used in curved dipping tubes and barrels with narrow openings.

Diameter only 32 mm.

- ▶ 50 ml contents
- ▶ Height 180 mm
- ▶ Weight 350 g
- ▶ Stainless steel V2A (1.4301)
- ▶ Screw-off top enables easy cleaning.
- ▶ Please order the appropriate lowering cable at the same time (page 120)
- ▶ Tested for use in the Ex protection zone 0
- ▶ Explosion Categories IIA and IIB



Use

1. When the dipping vessel is lowered, the liquid constantly runs through it.
2. When it is pulled back, both valves close automatically.
3. It can be emptied via the base valve or the upper screw-off cap.

Mini immersion cylinder								
Capacity ml	Dia. mm	Height mm	Price €	Item no.				
50	32	180		5365-5000	N4			

Target immersion cylinder



Precise liquid samples can be taken with the Target immersion cylinder.

- ▶ Weight 2.5 kg
- ▶ Incl. venting lowering cable (5 m), valve and cable reel
- ▶ Screw-off top enables easy cleaning.

Use

1. Lower the immersion cylinder to the required depth on the high-tensile, closed hose.
2. When the target has been reached, open the air valve at the tube end.
3. This vents the immersion cylinder and fills it.
4. Retrieve the immersion cylinder.
5. Open the cover and pour out the sample.

Target immersion cylinder				
Capacity ml	Dia. mm	Height mm	Price €	Item no.
500	75	210		5365-6000 N4

AquaSampler



Sampler for ground water samples from wells, pits and other sources. Fits all normal well shafts with control openings to Ø 2", without tilting or getting stuck. Ultra pure materials guarantee the highest degree of sample purity. Easy to clean thanks to rounded edges and threads.

- ▶ FEP/PTFE ultra pure, anti adhesive surface
- ▶ Without cable

Available as accessory:

- ▶ Robust manually-operated drum reel PP
- ▶ Lowering cable, V2A-woven, PTFE coated, see page 120

AquaSampler						
Capacity ml	Total length cm	Outer dia. mm	Price €	Quantity scale from	Scale price €	Item no.
350	40	46		5		5308-0350 N4
700	76	46		5		5308-0700 N4
1050	107	46		5		5308-1050 N4

Manually-operated reels



Manually-operated drum reel PP



Manually-operated drum reel PA electrically-conductive



Manually-operated reel Ex with grounding cable

The manually-operated drum reels are used to lower dipping bottles and immersion cylinders safely to the required depth in shafts, wells and tanks and then to pull them up again. The manually-operated drum reels can be equipped with various cables or chains. If flammable or highly flammable liquids are to be collected, then electrically conductive manually-operated drum reels must be used together with an earthing cable. The dipping bottles must be made of non-sparking metal.

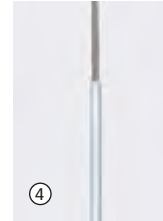
- ▶ High winding capacity of up to 150 m for cable 2 mm dia.
- ▶ Reel width: inner 44 mm, outer 55 mm, reel diameter: inner 100 mm, outer 180 mm

! Please order the required lowering cable separately.

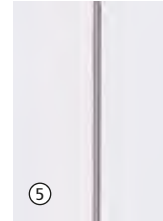


Manually-operated reel			
Model	Price €	Item no.	
① Manually-operated reel PP		5309-0010	N4
② Manually-operated reel PA		5309-0020	N4
③ Manually-operated reel Ex with grounding cable		5309-0030	N4

Lowering cables



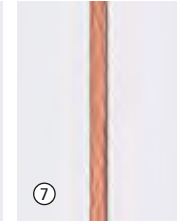
Stainless steel lowering cable, PTFE-coated



Lowering cable V2A



Lowering cable plastic



Copper cable with loops

Lowering cables

For dipping bottles and immersion cylinders, matching manually-operated drum reels made of various materials. Tensile load max. up to 10 kg.



Lowering/hoisting chain stainless steel



Snap-hook V4A



Brass shackle

Lowering cable				
Model	Length m	Dia. mm	Price €	Item no.
④ Stainless steel lowering cable, PTFE-coated	10	2		5309-0110 N4
④ Stainless steel lowering cable, PTFE-coated	25	2		5309-0125 N4
④ Stainless steel lowering cable, PTFE-coated	50	2		5309-0150 N4
⑤ Stainless steel lowering cable	10	1,25		5309-0301 N4
⑤ Stainless steel lowering cable	25	1,25		5309-0302 N4
⑤ Stainless steel lowering cable	50	1,25		5309-0305 N4
⑥ Lowering cable made of PP cord	10	2		5309-0201 N4
⑥ Lowering cable made of PP cord	25	2		5309-0202 N4
⑥ Lowering cable made of PP cord	50	2		5309-0205 N4
⑦ Copper lowering cable EX with loops	10	4,5		5309-0410 N4
⑦ Copper lowering cable EX with loops	25	4,5		5309-0425 N4
⑦ Copper lowering cable EX with loops	50	4,5		5309-0450 N4
⑧ Stainless steel chains	10	2,3		5309-0510 N4
⑧ Stainless steel chains	25	2,3		5309-0525 N4
⑧ Stainless steel chains	50	2,3		5309-0550 N4
⑨ Snap hooks V4A		5		0006-5300 N4
⑩ Shackles		4,5		0006-5301 N4

Disposable samplers | Collect samples - instead of complicated cleaning!



Profitability vs. quality

What would be the use of samples that are contaminated with previous ones? Absolutely nothing! On the contrary, these are the most expensive samples imaginable, as they lead to incorrect results.

However, high-quality cleaning of a sampler costs time and money. Cleaning is also more often complicated, especially for greasy, adhesive or hazardous substances.

Trained personnel should not be concerned with cleaning tasks, but correct sampling - the credo of our customers in all branches. Wholly driven by our motto: correct sampling. The cleaning methods need not be revalidated and complied with during regular audits, either.



Collect samples - instead of complicated cleaning! Disposable product - unpack, take sample, recycle! Made of environmentally friendly, recyclable PE or PP.

No contamination with other samples, no complicated, time-consuming, expensive cleaning.

Disposable samplers are produced under clean-room conditions, they are dustfree and individually packed in film. Optionally available as sterilised with gamma rays.

LiquiDispo



Disposable sampler for liquids of low viscosity up to about 10,000 cP.

► Diameter 21 mm

DispoPipette



Suitable for taking samples of liquids which are low in viscosity.

► Diameter 21 mm

ViscoDispo



Disposable sampler for highly viscous media up to max 100,000 cP.

► Diameter 21 mm

LiquiDispo

Length mm	Volume ml	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
500	100	HDPE	20		10		5393-1120 N3
500	100	HDPE/sterilized	20		10		5393-1121 N3
1000	190	HDPE	20		10		5393-1130 N3
1000	190	HDPE/sterilized	20		10		5393-1131 N3

DispoPipette

Length mm	Volume ml	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
900	180	HDPE	50		5		5393-5531 N3
900	180	HDPE/sterilized	50		5		5393-5532 N3

ViscoDispo

Length mm	Volume ml	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
500	100	HDPE	20		10		5393-3320 N3
500	100	HDPE/sterilized	20		10		5393-3321 N3
1000	190	HDPE	20		10		5393-3330 N3
1000	190	HDPE/sterilized	20		10		5393-3331 N3

PowderDispo



PowderDispo is ideal for taking a cross-sectional sample from within a bulk powder, as a disposable sampler.

- ▶ Length of the sample chamber 500 mm,
- ▶ diameter 22 mm

MicroDispo



Disposable sampler for pourable bulk goods up to 0.5 mm particle size.

- ▶ Diameter 21 mm
- ▶ For removal of the smallest quantities

ZoneDispo



Disposable sampler for pourable bulk goods up to 2 mm particle size. Hole Ø 11 mm

- ▶ Diameter 25 mm
- ▶ For cross-section samples through all layers of the sample
- ▶ Three openings

PowderDispo

Total length mm	Lance mm	Volume ml	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
620	500	100	HDPE	20		10		5393-5522 N3
620	500	100	HDPE/sterilized	20		10		5393-5521 N3

MicroDispo

Length mm	Volume ml	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
500	5	HDPE	20		10		5393-2220 N3
500	10	HDPE	20		10		5393-2240 N3
1000	5	HDPE	20		10		5393-2230 N3
1000	10	HDPE	20		10		5393-2250 N3

ZoneDispo

Total length mm	Lance mm	Volume ml	No. of openings	Material	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
620	500	100	3	HDPE	20		10		5393-4420 N3
620	500	100	3	HDPE/sterilized	20		10		5393-4421 N3
970	860	190	3	HDPE	20		10		5393-4430 N3

SteriPlast from Bürkle – for the highest purity in laboratories and science



SteriPlast

Bürkle SteriPlast products – scoops, spatulas and spoons – are high-quality, ergonomically shaped disposable products that are specially designed and optimised for sampling purposes. They are produced, assembled and individually packed in Bürkle's own clean room and then sterilised by gamma rays (min. 10 kGy).



Clean room production

The SteriPlast products thus meet all the requirements for absolutely sterile sampling with first class certification.



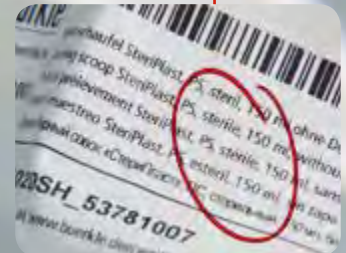
SteriPlast Bio

SteriPlast bio-products are only manufactured with renewable raw materials and then also sterilised by gamma rays (min. 10 kGy). To create a completely sustainable product, the individual packaging is also made of bio-PE. This is 100 % recyclable and is manufactured without fossil raw materials. This also involves a CO₂ saving as well as a reduction of the greenhouse effect.



Individually packed

The highest purity and ecological sustainability combined perfectly!



Gamma ray sterilised

SteriPlast sample scoop



The SteriPlast sample scoop made of polystyrene is produced and assembled in our clean room of class 7 (10,000), individually packaged for disposable use and then sterilised by gamma rays. The sample scoop is ideal for powders, granulates and pastes. The scoop with transparent cover can be closed immediately after sampling and the sterility and exclusion of contamination can therefore be safeguarded.

- ▶ PS, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production, assembly and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast sample scoop									
Capacity ml	Model	Length mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.		
25	without cover	141	10		10		5378-1001	N4	
25	with cover	142	10		10		5378-1002	N4	
50	without cover	160	10		10		5378-1003	N4	
50	with cover	161	10		10		5378-1004	N4	
100	without cover	205	10		10		5378-1005	N4	
100	with cover	206	10		10		5378-1006	N4	
150	without cover	216	10		10		5378-1007	N4	
150	with cover	218	10		10		5378-1008	N4	

SteriPlast Bio sample scoop



The SteriPlast Bio sample scoop made of green PE is produced in our clean room of class 7 (10,000), individually packaged in bio-PE film for disposable use and then sterilised by gamma rays. Green PE bio-plastic has all the suitable properties of conventional polyethylene but is manufactured from renewable raw materials and can be completely recycled. The sample scoop is ideal for powders, granulates and pastes.

- ▶ Product and packaging made of renewable raw materials
- ▶ Green PE, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast Bio sample scoop									
Capacity ml	Length mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.			
25	141	10		10		5379-1001	N4		
50	160	10		10		5379-1003	N4		
100	205	10		10		5379-1005	N4		
150	216	10		10		5379-1007	N4		

SteriPlast sample spatula



The SteriPlast sample spatula made of polystyrene is produced and assembled in our clean room of class 7 (10,000), individually packaged for disposable use and then sterilised by gamma rays. As a result of the long, ergonomically-shaped, stable handle and a sharp blade, it is possible to even penetrate directly into containers such as paper or plastic sacks. The sample spatula is ideal for sampling powders, granulates and pastes. The scoop with transparent sealing sleeve can be closed again immediately after sampling and the exclusion of contamination can be safeguarded for the sterile sample taken.

- ▶ PS, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production, assembly and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast sample spatula										
Model	Total length mm	Insertion depth mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.			
without sleeve	263	150	10		10		5378-1009	N4		
with sleeve	268	150	10		10		5378-1010	N4		

SteriPlast Bio sample spatula



The SteriPlast Bio sample spatula made of green PE is produced in our clean room of class 7 (10,000), individually packaged in bio-PE film for disposable use and then sterilised by gamma rays. Green PE bio-plastic has all the suitable properties of conventional polyethylene and can be completely recycled but is manufactured from renewable raw materials. As a result of the long, ergonomically-shaped, stable handle and a sharp blade, it is possible to even penetrate directly into containers such as paper or plastic sacks. The sample spatula is ideal for sampling powders, granulates and pastes.

- ▶ Product and packaging made of renewable raw materials
- ▶ Green PE, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast Bio sample spatula											
Total length mm	Insertion depth mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.					
263	150	10		10		5379-1009	N4				

SteriPlast sample spoon



The SteriPlast sample spoon made of polystyrene is produced in our clean room of class 7 (10,000), individually packaged for disposable use and then sterilised by gamma rays.

The sample spoon is available in two sizes, 2.5 ml (similar to a tea-spoon) and 10 ml (similar to a tablespoon), and is ideal for sampling powders, granulates and fluids.

- ▶ PS, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast sample spoon									
Length mm	Capacity ml	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.			
127	2,5	100		10		5378-1011	N4		
170	10	100		10		5378-1012	N4		

SteriPlast Bio sample spoon



The SteriPlast Bio sample spoon made of green PE is produced in our clean room of class 7 (10,000), individually packaged in bio-PE film for disposable use and then sterilised by gamma rays.

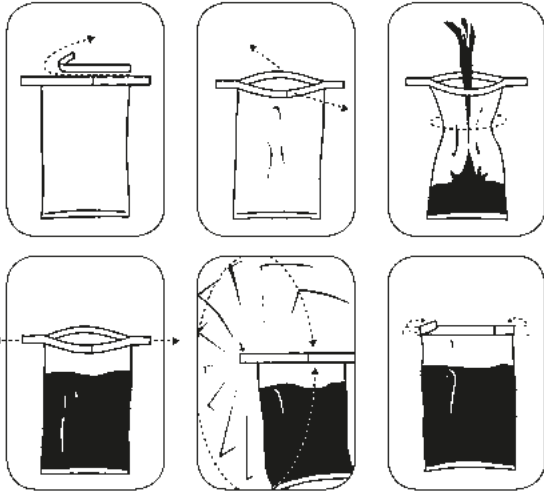
Green PE bio-plastic has all the suitable properties of conventional polyethylene but is manufactured from renewable raw materials and can be completely recycled.

The sample spoon is available in two sizes, 2.5 ml (similar to a tea-spoon) and 10 ml (similar to a tablespoon), and is ideal for sampling powders, granulates and fluids.

- ▶ Product and packaging made of renewable raw materials
- ▶ Green PE, white
- ▶ Individually packaged and sterilised by gamma rays
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

SteriPlast Bio sample spoon										
Length mm	Capacity ml	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.				
127	2,5	100		10		5379-1011	N4			
170	10	100		10		5379-1012	N4			

Sampling bag SteriBag | the sterilised packaging bag



The sterilised sampling bag SteriBag for samples in chemistry, pharmaceuticals, medicine, veterinary science and foodstuffs etc.

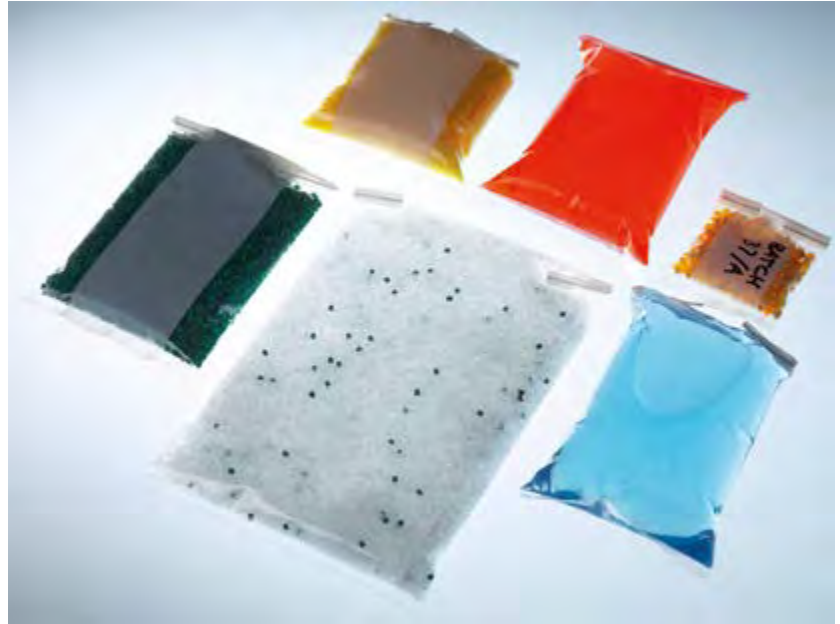
The bags are made of Polyethylene and are therefore exceptionally tearproof and leakproof.

The SteriBag sampling bag is distinguished by its safe handling. When used according to instructions, samples are guaranteed sterile.

Integrated safety: The tab-ends are sealed in plastic film to prevent skin injuries.

- ▶ Sterilised
- ▶ Can be labelled
- ▶ Leakproof
- ▶ Save space
- ▶ Transparent
- ▶ With practical closure to tear-open
- ▶ Proven millions of times

Bulk prices



Sampling bag SteriBag

Capacity ml	Model	L x W mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
60	without labelling area	127 x 76	500		6		5344-0060	N3
60	with labelling area	127 x 76	500		6		5344-0061	N3
150	without labelling area	178 x 76	500		6		5344-0180	N3
150	with labelling area	178 x 76	500		6		5344-0181	N3
450	without labelling area	229 x 114	500		6		5344-0540	N3
450	with labelling area	229 x 114	500		6		5344-0541	N3
650	without labelling area	229 x 140	500		6		5344-0720	N3
650	with labelling area	229 x 140	500		6		5344-0721	N3
900	without labelling area	305 x 114	500		6		5344-0810	N3
900	with labelling area	305 x 114	500		6		5344-0811	N3
1650	without labelling area	305 x 178	250		12		5344-1650	N3
1650	with labelling area	305 x 178	250		12		5344-1651	N3

SteriBag StandUp sample bag

SteriBag StandUp is a sterile sample bag with a stand-up base. The special bottom unfolds as soon as the bag is filled. This makes SteriBag StandUp stable and able to stand on its own without a separate stand or support, leaving both your hands free to take the sample and fill the bag. The wire bracket at the closure keeps the bag open, making it easy and convenient to fill.

The sample bag is the ideal space-saving, unbreakable, inexpensive and sterile replacement for bottles and beakers.

Can be used for samples available as liquids, powders, solids and pastes; suitable for foods and can be frozen.

The stable standing SteriBag StandUp sample bag is easy and safe to transport.

SteriBag StandUp, the sample bag for easy handling of samples.

- ▶ Stands stably
- ▶ Protected against discharge
- ▶ Sterilised
- ▶ With labelling field



Bulk prices

SteriBag StandUp sample bag

Capacity ml	L x W mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
400	229x114	500		5		5344-0400 N3
600	229x152	500		5		5344-0600 N3



SteriPlast sampling tube



SteriPlast

Sterile sampling tube with removable handle and tightly closing sealing cover. The lid can be opened with one hand and is then at a 90° angle. Liquid/condensate in the lid goes into an absorbing channel integrated into the lid, nothing is lost, nothing can drip. The sterile sampling tube with a handle of 24 cm in length enables a clean sample to be placed directly in the sampling container. This mainly prevents cross-contamination.

- ▶ Polypropylene, blue transparent
- ▶ Sterile, packed separately

*** Bulk prices**

SteriPlast sampling tube

Capacity ml	Dia. mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.		
90	43	80		150		6206-0101 N3		

SteriPlast syringe



The syringe is used to take sterile samples and store them. The sample amount can be read off from the printed contents graduation. The syringe is supplied in a sterile package and is ready for immediate use. The syringe can be extended to any length with additional tubing. A Luer adapter is supplied for the 100 ml syringe.

- ▶ PP, transparent
- ▶ Contents graduation
- ▶ Sterilised, packed separately

SteriPlast

*** Bulk prices**

SteriPlast syringe

Capacity ml	Pieces per pack	Division ml	Price €	Quantity scale from	Scale price €	Item no.		
50	10	1		6		5325-0060 N4		
100	10	2		5		5325-0100 N4		

PharmaSpoon | for ultrapure sampling



PharmaSpoon for taking samples of powdery substances, intermediate products and material in the pharmaceutical industry. Special materials with excellent surface qualities must be used for this to prevent cross-contamination. Our PharmaSpoon fulfils these requirements. Made of stainless steel V4A (1.4404), surface highly polished by hand (not electro-polished!). The excellent surface properties of the PharmaSpoon provide significant advantages.

- ▶ Possible residues are even visible in the trace sector (μg sector)
- ▶ The surface is easy to clean
- ▶ The PharmaSpoon is also suitable for sterile sampling

i The PharmaSpoon was developed by an internationally known pharmaceutical company in Basel, Switzerland, and its usefulness has been confirmed in actual practice.

PharmaSpoon

Total length mm	Price €	Quantity scale from	Scale price €	Item no.
650		5		5324-0001 N2

Sample-spoon



Sampling spoon for withdrawing small quantities of samples. This specially shaped spoon lets you reach almost every corner in a container and prevents samples from trickling out.

- ▶ Made of AISI 304 (1.4301) stainless steel
- ▶ Largely chemical resistant (not against acids and alkalis)

Sample-spoon

Length mm	Price €	Quantity scale from	Scale price €	Item no.
150		10		5320-0150 N4
180		10		5320-0180 N4
210		10		5320-0210 N4
300		10		5320-0300 N4
400		10		5320-0400 N4

Scoop AISI 304



- ▶ Stainless steel V2A (1.4301)
- ▶ Sterilisable
- ▶ Robust

EasyScoop



When sampling bulk goods with a high specific weight, conventional scoops subject the user's wrist to great stress. EasyScoop with its centrally arranged inner grip is ergonomically designed and ensures easy and safe work. As EasyScoop is considerably shorter than conventional scoops, it is easier to take samples from narrow containers.

- ▶ Made of light aluminium, bright-anodised

Scoop AISI 304

Capacity ml	Dia. mm	Price €	Quantity scale from	Scale price €	Item no.
120	50		5		5370-0120 N3
450	75		5		5370-0450 N3
1000	100		5		5370-1000 N3
1500	120		5		5370-1500 N3
2500	150		5		5370-2000 N3

EasyScoop

Capacity ml	Length mm	Weight g	Price €	Item no.
1500	200	325		5356-1500 N2
2000	300	575		5356-2000 N2

FoodScoop



Very stable hand scoop for various applications, particularly suited for the food industry. Seamless connection of scoop and hollow handle, therefore without crevices and edges. Especially smooth, highly polished surface.

- ▶ Especially sturdy model
- ▶ Stainless steel V2A (1.4301)
- ▶ With handy suspension eyelet

FoodScoop								
Capacity ml	Total length mm	L x W mm	Price €	Quantity scale from	Scale price €	Item no.		
100	215	120 x 60		5		5371-0100	N3	
200	230	140 x 75		5		5371-0200	N3	
250	245	155 x 85		5		5371-0250	N3	
350	290	180 x 100		5		5371-0350	N3	
500	350	220 x 130		5		5371-0500	N3	

PharmaScoop



This sample scoop has been developed in order to meet the high requirements of the pharmaceutical industry, such as those contained in the FDA regulations.

Like all samplers for the pharmaceutical industry, they are made of stainless steel V4A without edges, crevices or undercuts in which sample residues could collect and contaminate subsequent samples. The highly polished inner and outer surfaces of the scoop therefore meet all the requirements for GMP compliance in production and sampling.

- ▶ Stainless steel V4A (1.4401)
- ▶ GMP conform
- ▶ Highly polished

PharmaScoop							
Capacity ml	Dia. mm	Length mm	Price €	Item no.			
10	25	45		5324-0010	N2		
50	38	70		5324-0011	N2		
100	50	100		5324-0012	N2		
500	95	140		5324-0018	N2		
750	95	210		5324-0013	N2		
1000	110	235		5324-0014	N2		
1250	125	195		5324-0015	N2		
1700	135	230		5324-0016	N2		
2500	185	215		5324-0017	N2		

Stainless steel measuring spoons



Stainless steel measuring spoon in a set of 4, as a measuring aid for fast and easy measuring from 1.25 to 15 ml. The volume is engraved on the handle of each measuring spoon.

- ▶ Stainless steel V2A (1.4301)
- ▶ Volumes: 1.25 ml, 2.5 ml, 5 ml, 15 ml
- ▶ Spoon high-gloss finished, handle matt polished

Stainless steel measuring spoons

Capacity ml	Price €	Quantity scale from	Scale price €	Item no.
1,25 - 15		10		5334-8000 N4



Volumetric spoons



The capacity is printed on the spoon handle. Available as a set with 8 volumetric spoons or separate in bags of 100 volumetric spoons.

- ▶ Polystyrene, blue
- ▶ Round shape, easy emptying

Volumetric spoons							
Model	Capacity ml	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
set with 8 spoons	0,5 - 50	8		10		5334-0001	N4
pack	0,5	100		10		5334-0005	N4
pack	1	100		10		5334-0010	N4
pack	2,5	100		10		5334-0025	N4
pack	5	100		10		5334-0050	N4
pack	10	100		10		5334-0100	N4
pack	15	100		10		5334-0150	N4
pack	25	100		10		5334-0250	N4
pack	50	100		10		5334-0500	N4

Measuring scoops



Universal graduated shovel for filling and measuring of powders and granules. For exact metering, the graduated shovel is to be overfilled and the excess at the upper edge of the shovel is to be wiped off.

- ▶ PP, white
- ▶ High chemical-resistance
- ▶ Calibrated volume when full to the brim

Measuring scoops							
Capacity ml	L x W mm	Price €	Quantity scale from	Scale price €	Item no.		
2	60 x 21		48		9614-0002	N3	
5	82 x 27		48		9614-0005	N3	
10	100 x 34		48		9614-0010	N3	
25	135 x 44		48		9614-0025	N3	
50	160 x 55		48		9614-0050	N3	
100	200 x 70		48		9614-0100	N3	
250	260 x 90		24		9614-0250	N3	
500	315 x 118		24		9614-0500	N3	
1000	385 x 134		24		9614-1000	N3	

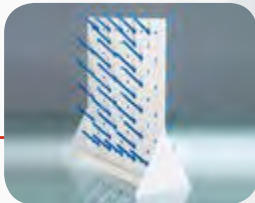
LaboPlast from Bürkle – the quality brand for laboratories and science

LaboPlast is the Bürkle brand for high-quality plastic products that have been specially designed and developed to optimally meet the demanding and in part special requirements in laboratories, industry and science. Here LaboPlast stands for the best quality, excellent craftsmanship and outstanding material properties.

Test the products and get to know and appreciate our LaboPlast product lines!

LaboPlast bio-products are only manufactured from renewable raw materials. To create a completely sustainable product, the individual packaging is also made of bio-PE. This is 100 % recyclable and is manufactured without fossil raw materials. This also involves a CO₂ saving as well as a reduction of the greenhouse effect.

The highest quality and ecological sustainability combined perfectly!



LaboPlast scoop, disposable



The LaboPlast disposable scoop made of polystyrene is produced and assembled in our clean room of class 7 (10,000) and individually packaged for disposable use.

The disposable scoop is ideal for powders, granulates and pastes. The scoop with transparent cover can be closed immediately after sampling and the exclusion of contamination can therefore be safeguarded.

- ▶ PS, white
- ▶ Individually packaged
- ▶ Production, assembly and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast scoop, disposable

Capacity ml	Model	Length mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.		
25	without cover	141	10		10		5378-0001 N4		
25	with cover	142	10		10		5378-0002 N4		
50	without cover	160	10		10		5378-0003 N4		
50	with cover	161	10		10		5378-0004 N4		
100	without cover	205	10		10		5378-0005 N4		
100	with cover	206	10		10		5378-0006 N4		
150	without cover	216	10		10		5378-0007 N4		
150	with cover	218	10		10		5378-0008 N4		

LaboPlast Bio scoop



The LaboPlast Bio disposable scoop made of green PE is produced in our clean room of class 7 (10,000) and individually packaged in bio-PE film for disposable use.

Green PE bio-plastic has all the suitable properties of conventional polyethylene but is manufactured from renewable raw materials and can be completely recycled.

- ▶ Product and packaging made of renewable raw materials
- ▶ Bio-PE, white
- ▶ Individually packaged
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast Bio scoop

Capacity ml	Length mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.			
25	141	10		10		5379-0001 N4			
50	160	10		10		5379-0003 N4			
100	205	10		10		5379-0005 N4			
150	216	10		10		5379-0007 N4			

LaboPlast spatula, disposable



The LaboPlast disposable spatula made of polystyrene is produced and assembled in our clean room of class 7 (10,000) and individually packaged for disposable use.

As a result of the long, ergonomically-shaped, stable handle and a sharp blade, it is possible to even penetrate directly into containers such as paper or plastic sacks. The disposable spatula is ideal for sampling powders, granulates and pastes.

The spatula with transparent sealing sleeve can be closed again immediately after sampling and the exclusion of contamination can be safeguarded for the sample taken.

- ▶ PS, white
- ▶ Individually packaged
- ▶ Production, assembly and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast spatula, disposable

Model	Total length mm	Insertion depth mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
without sleeve	263	150	10		10		5378-0009 N4
with sleeve	268	150	10		10		5378-0010 N4

LaboPlast Bio spatula



The LaboPlast Bio disposable spatula made of green PE is produced in our clean room of class 7 (10,000) and individually packaged in bio-PE film for disposable use.

Green PE bio-plastic has all the suitable properties of conventional polyethylene and can be completely recycled but is manufactured from renewable raw materials.

As a result of the long, ergonomically-shaped, stable handle and a sharp blade, it is possible to even penetrate directly into containers such as paper or plastic sacks. The spatula is ideal for sampling powders, granulates and pastes.

- ▶ Product and packaging made of renewable raw materials
- ▶ Green PE, white
- ▶ Individually packaged
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast Bio spatula

Total length mm	Insertion depth mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
263	150	10		10		5379-0009 N4

LaboPlast spoon, disposable



The LaboPlast disposable spoon made of polystyrene is produced in our clean room of class 7 (10,000) and individually packaged for disposable use.

The spoon is available in two sizes, 2.5 ml (similar to a teaspoon) and 10 ml (similar to a tablespoon), and is ideal for sampling powders, granulates and fluids.

- ▶ PS, white
- ▶ Individually packaged
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast spoon, disposable

Length mm	Capacity ml	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.		
127	2,5	100		10		5378-0011	N4	
170	10	100		10		5378-0012	N4	

LaboPlast Bio spoon



The LaboPlast Bio disposable spoon made of green PE is produced in our clean room of class 7 (10,000) and individually packaged in bio-PE film for disposable use.

Green PE bio-plastic has all the suitable properties of conventional polyethylene but is manufactured from renewable raw materials and can be completely recycled.

The disposable spoon is available in two sizes, 2.5 ml (similar to a teaspoon) and 10 ml (similar to a tablespoon), and is ideal for sampling powders, granulates and fluids.

- ▶ Product and packaging made of renewable raw materials
- ▶ Green PE, white
- ▶ Individually packaged
- ▶ Production and packaging according to clean room class 7
- ▶ With EU foodstuffs and FDA approval

LaboPlast Bio spoon

Length mm	Capacity ml	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.			
127	2,5	100		10		5379-0011	N4		
170	10	100		10		5379-0012	N4		

Plastic scoops and scrapers

Iron scoops are loud, they can be dented, they rust and they are heavy. Plastic scoops have none of these disadvantages and are also hygienic because they are made in one piece and have a non-stick surface. They also have a high chemical resistance, they are unbreakable and, depending on the version, may be anti-static, anti-microbial, suitable for use with food and available in different colours (cadmium-free) – all valuable advantages!

Depending on the version the scoops may be anti-static, anti-microbial, suitable for use with food and available in different colors (cadmium-free).

The scoops and scrapers are made of polypropylene and contain additives for different applications:

- ▶ Industry: green
- ▶ Foodstuffs: white

Six products:

- ▶ Scraper with fixed handle
- ▶ Hand scoop
- ▶ Filling scoop, ideal for sampling
- ▶ 2-part shovel with D-grip
- ▶ 2-part shovel with T-grip
- ▶ 1-part shovel reduces contamination

Pharmaceuticals, biotechnology, foods, feed, chemistry, industry, agriculture, fish farming, sampling, veterinary use.

The shape of the food scoops corresponds to the industrial scoops on page 141.



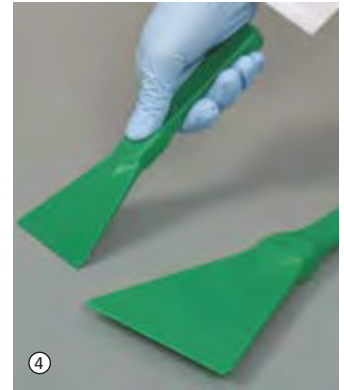
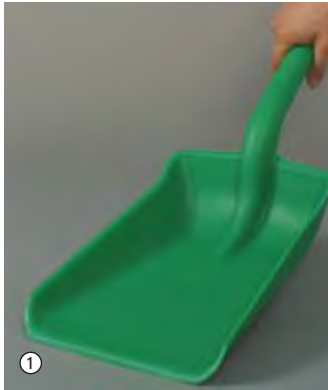
Scoops and scrapers for foodstuffs

Polypropylene's easy-to-clean, smooth and pore-free surface makes these scoops extremely suitable for the food sector. The scoops can be also used for boiling products.

- ▶ For foodstuffs (FDA and (EU) Nr. 10/2011)

① Hand scoops for foodstuffs										
L x W mm	Total length cm		Weight g	Price €	Quantity scale from	Scale price €	Item no.			
315 x 247	52,7		509		5		8300-1010	N3		
② Filling scoops for foodstuffs										
W x D x L mm	Total length cm		Weight g	Price €	Quantity scale from	Scale price €	Item no.			
110 x 150 x 250	25		90		5		8300-5010	N3		
138 x 187 x 310	31		187		5		8300-5011	N3		
167 x 230 x 355	35		289		5		8300-5012	N3		
⑤ 1-part shovels for foodstuffs										
Handle	W x D x L mm	Total length cm	Weight g	Price €	Quantity scale from	Scale price €	Item no.			
D	279 x 362 x 1107	111	1564		5		8300-0010	N3		
D	347 x 410 x 1100	110	1882		5		8300-0011	N3		
③ 2-part shovel for foodstuffs										
Handle	W x D x L mm	Total length cm	Weight g	Price €	Quantity scale from	Scale price €	Item no.			
T	247 x 315 x 966	97	1040		5		8300-2010	N3		
④ Scrapers for foodstuffs										
L x W mm			Weight g	Price €	Quantity scale from	Scale price €	Item no.			
205 x 75			44		5		8300-4011	N3		
250 x 110			80		10		8300-4010	N3		

Plastic scoops and scrapers



Scoops and scrapers for industry

With anti-static additive, ideal for robust use in chemistry and industry. Polypropylene has a high resistance to chemicals and temperatures. The scoops are unbreakable, easy to clean and light-weight.

► Anti-static

① Hand shovel for industry

L x W mm	Total length cm	Weight g	Price €	Quantity scale from	Scale price €	Item no.
315 x 247	51,5	509		5		8300-1003 N3
350 x 257	58,7	810		5		8300-1001 N3

② Filling scoops for industry

W x D x L mm	Total length cm	Weight g	Price €	Quantity scale from	Scale price €	Item no.
110 x 150 x 250	25	90		10		8300-5001 N3
138 x 187 x 310	31	187		5		8300-5002 N3
167 x 230 x 355	35	289		5		8300-1002 N3

③ 2-part shovel for industry

Handle	W x D x L mm	Total length cm	Weight g	Price €	Quantity scale from	Scale price €	Item no.
T	247 x 315 x 966	97	1004		5		8300-2001 N3
D	257 x 350 x 1045	104,5	1280		5		8300-3006 N3

④ Scrapers for industry

L x W mm	Weight g	Price €	Quantity scale from	Scale price €	Item no.
205 x 75	44		10		8300-4001 N3
250 x 110	80		10		8300-4002 N3

BeefSteaker | as per HACCP



Meat sampler for taking bacteriological samples from the surfaces of dead animals in slaughterhouses and in butchers' shops (cattle, pigs, sheep, goats and horses). The BeefSteaker is used to cut out a 25 mm round sample from the animal's skin. The stainless steel (1.4034) cutter allows the sample to be cut out easily.

The BeefSteaker can also be used for other sampling purposes (histology, medicine, food and semi-luxury articles, cheese factories, agriculture).

The BeefSteaker can be steam-sterilised or flamed. A hole in the crown prevents air compression and is used for ejecting the sample.

BeefSteaker			
Dia. mm	Price €	Item no.	
25		5388-1000 N4	
Accessories			
Description	Price €	Item no.	
Transport case BeefSteaker		3600-0101 N3	

IceSampler | for frozen, pasty materials



Sampler developed for sampling from frozen, highly viscous, paste-like materials such as ice-cream and similar substances. The drill-shaped cutter screws itself into the frozen goods independently when being rotated.

The collection cylinder can easily be detached via a bayonet connection. The sample is then available and can be removed.

- ▶ Stainless steel V4A (1.4404), electro-polished
- ▶ Sterilisable
- ▶ Easy cleaning
- ▶ Collection cylinder 38 mm Ø

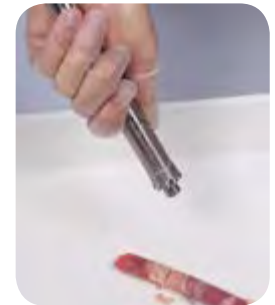
IceSampler				
Length mm	Volume ml	Price €	Item no.	
300	50		5339-0300 N2	
550	50		5339-0550 N2	
1050	50		5339-1050 N2	

Ice borer | for deep-frozen and semi-solid substances



Sampler for deep-frozen and semi-solid substances products in the food industry. The sharp sawing crown of the very robust hollow borer rapidly cuts into the sample. A cylindrical sample (cross-sectional sample) of up to 20 cm can be cut out.

Ice borer consisting of three parts: Borer, borer head for use in conventional drills and rod for pressing the cylindrical sample out of the borer head.



- ▶ Stainless steel V4A (1.4404/1.4571)
- ▶ Sterilisable
- ▶ 20 cm boring depth

Ice borer				
Inner dia. mm	Outer dia. mm	Drilling depth mm	Price €	
16	21	200		Item no. 5323-0200 N4
50	54	200		5323-2010 N4

Soil sampler GeoSampler | soil sampling



Soil sampler for light soils, meadows and lawns. The foot bar of model 5350-5006 makes work much easier.

- ▶ Depth graduation 10 cm divisions
- ▶ Stainless steel

Soil sampler GeoSampler

Model	Total length cm	Flute length mm	Outer dia. mm	Inner flute dia. mm	Weight g	Price €	Item no.
without foot bar	56	300	17	11	550		5350-5003 N2
with foot bar	81	300	20	14	1500		5350-5006 N2

Soil sampler Puerckhauer | soil sampling



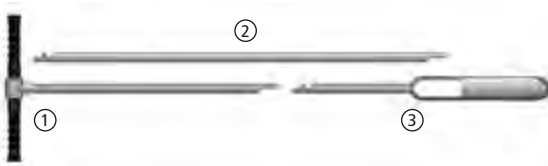
Very robust Puerckhauer-sampler for heavy and stony soils. Model 5350-5018 has a conically-tapered 60 cm tip which makes it much easier to extract the driven-in sampler. Ideal for N-min sampling 0 – 90 cm.

- ▶ Depth graduation 10 cm divisions
- ▶ Attachable handle, with non-slip plastic grips
- ▶ Reinforced impact head
- ▶ Stainless steel

Soil sampler Puerckhauer

Total length cm	Flute length mm	Outer dia. top mm	Outer dia. bottom mm	Inner flute dia. mm	Weight g	Price €	Item no.
81	600	20	20	13	2400		5350-5012 N2
117,5	1000	28	25	18	3800		5350-5018 N2

Mole with handle and bar

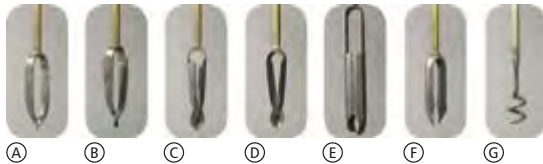


Very robust model with specially hardened forged drill bits. For determining soil properties, moisture and structure. The shape of the Mole's drill bits ensures minimum friction when drilling and removing the Mole from the ground. This reduces physical effort to a minimum.

The Mole has different components. Handle with 75 cm rod, extension rod 100 cm if necessary and one of seven available drill bits, each of which is designed for a particular soil type. The components can be combined without any problems. Extension rods can extend the working depth of the Mole down to 5 m.



Please order drill bits separately!



① Mole with handle and bar			
Model	Length cm	Price €	Item no.
handle with rod, without drill bit	75		5350-1005 N4
📦 Accessories			
Description		Price €	Item no.
② Extension for mole			5350-1010 N4
Transport case LxWxH 121x22,5x11 cm			3600-2120 N4

Drill bits for mole

There are various drill bits for Mole, which are each designed for very specific soil properties:

Ⓐ Clay and damp soil

With narrow side panels for minimum soil friction/resistance. As wet soils are usually very cohesive, the soil still adheres to the bit very well.

Ⓑ Sand

With broad side panels and therefore a large retention capacity for the sand.

Ⓒ Coarse sand

With extra broad side panels enclosing even more of the bit so that even coarse sandy soils and very dry soils are retained.

Ⓓ Combination

Retains both strongly cohesive and less cohesive soils.

Ⓔ Riverside

Very suitable for drilling in hard, encrusted soils and soils mixed with fine gravel. The drill cutters project from the drill itself, so that friction is greatly reduced.

Ⓕ Gravel drill

With slightly rounded, oblique scoops which pull themselves downward in the gravel. Any stones present are clamped between the drill sides. Finer soil material (coarse sand with fine gravel) is retained in the drill bit.

Ⓖ Stone catcher

The stone catcher is used to collect and remove stones that prevent proper sampling with one of the other drill bits.

③ Drill bits for mole				
Model	Price €	Quantity scale from	Scale price €	Item no.
Ⓐ clay and wet soils		5		5350-1015 N4
Ⓑ sand		5		5350-1020 N4
Ⓒ coarse sand		5		5350-1025 N4
Ⓓ combination		5		5350-1030 N4
Ⓔ riverside		5		5350-1035 N4
Ⓕ gravel drill		5		5350-1040 N4
Ⓖ stone catcher		5		5350-1045 N4

MiniTherm



Temperature control This immersion/insertion thermometer is suitable for measuring temperatures in gases, soft or powdered substances and liquids. New: The mini thermometer in watertight design can simply be rinsed under flowing water or even cleaned in a dishwasher.

- ▶ Easy and quick battery replacement, battery included
- ▶ Sensor directly in the measuring tip
- ▶ Handy
- ▶ Many uses

MiniTherm



Model	Measuring range °C	Length mm	Dia. mm	IP Code	Price €	Item no.
standard	-50 to +150	133	4	41		5384-0011 N2
watertight	-20 to +230	120	4	67		5384-0012 N2

SnowPack® dry ice machine



SnowPack® enables you to obtain a -79 °C dry ice tablet weighing 50 or 250 g within a few moments, without complicated technology and without electricity! You can therefore obtain low-cost cooling to very low temperatures at any time you like.

SnowPack® is often used in hospitals, universities, schools, institutes, laboratories, in the chemical industry and in materials testing facilities.

Examples of use: Lowering the temperature in cooling baths or cold traps, pre-cooling tissue samples, ensuring safe transport or embedding biological substances, freezing blood and tissue samples, studies in chemistry, physics and materials technology, etc.

Dry ice is easy to handle, odourless and flavourless. The SnowPack® dry ice machine can be installed on any commercial CO₂-bottle with a standpipe (without pressure regulator) (thread W 21.80 x 1/14" according to DIN 477-1 No. 6). These often exist in many production facilities and laboratories anyway. If this is not the case, a bottle can be rented for a small price from a local specialist gas distributor. For more info see page 253.

SnowPack® dry ice machine

Model	Tablet dia. x H mm	Weight g	Gas escape time ca. min	Tablets per 22 kg bottle	Price €	Item no.
SnowPack® 50	50 x 30	50	0,5	approx. 90		9805-0030 N4
SnowPack® 250	80 x 60	250	1	approx. 16		9805-0200 N4

Sample containers | for neat, safe and reliable transport from sampling to analysis



Sample boxes, aseptic

Sample box with tightly closing sealing cover. The lid can be opened with one hand and its hinge angle is 90°. Liquid/condensate in the lid runs into an absorbing groove integrated in the lid, nothing is lost, nothing can drip.

The box is completely tight, has no crevices, is therefore easy to fill and can be emptied without residues. The sample box is produced under aseptic conditions. It is autoclavable and suitable for deep freezing.

- ▶ PP, transparent
- ▶ Aseptic
- ▶ With area for labelling and graduation



Sample container, round

Sample box with screw lid. Ideal for taking samples and transport. Available in two material qualities: highly transparent PP for powder, pastes, liquids, or PFA for super pure collection of samples. Emptying without residues because there are no crevices.

- ▶ PP or PFA autoclavable
- ▶ Thick sides
- ▶ Sample container PFA not suitable for food



Sample tubes aseptic, with seal

The sample boxes are manufactured in the cleanroom and sealed in the injection moulding machine at over 100°C, so that the insides of the boxes are virtually sterile. This method makes the boxes absolutely leakproof, as the cap and box adapt ideally to each other during the cooling process. No crevices, therefore easy to fill and can be emptied without residues. With tamper-evident seal which guarantees virtual sterility until the first opening. After opening, it can be sealed again with a practical seal.

- ▶ PP, transparent
- ▶ Aseptic
- ▶ With graduation
- ▶ Sterilisable



Sample boxes, aseptic

Capacity ml	Height mm	Dia. mm	Model	Price €	Quantity scale from	Scale price €	Item no.
50	78	31	with labeling area and graduation		650		6206-0060 N3
90	80	43	with labeling area and graduation at 80ml		350		6206-0100 N3
300	88	75	graduated		240		6206-0300 N3

Sample container, round

Material	Capacity ml	Inner dia. mm	Outer dia. mm	Height with cap mm	Price €	Quantity scale from	Scale price €	Item no.
PP	60	35	50	93		10		6203-0060 N3
PP	180	50	65	119		10		6203-0180 N3
PFA	90	50	65	65		10		6205-0090 N3
PFA	180	50	65	119		10		6205-0180 N3

Sample tubes aseptic, with seal

Capacity ml	Height mm	Dia. mm	Price €	Quantity scale from	Scale price €	Item no.
55	84	29		90		6207-0055 N3
340	119	63		90		6207-0340 N3

Tubes with screw cap



Shapely packing container with screw cap. Emptying without residues because there are no crevices, cost-effective.

- ▶ PP, white
- ▶ Sterilisable

Tubes with screw cap							
Capacity ml	Dia. mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.	
12	25	31		100		6214-0012	N3
25	31	40		100		6214-0025	N3
60	41	56		100		6214-0060	N3
90	52	52		100		6214-0090	N3
125	52	67		100		6214-0125	N3
250	68	79		100		6214-0250	N3
625	90	113		70		6214-0600	N3
1000	102	129		80		6214-1000	N3

Sample beaker with cover



Sample beaker with liquid-tight red screw-on cover. The sample beakers are aseptic and suitable for use with food. The beakers can be autoclaved without the cover.

- ▶ PP beaker, LDPE cover
- ▶ Temperature resistance of beaker $-20^{\circ}\text{C}/+120^{\circ}\text{C}$, cover $-80^{\circ}\text{C}/+75^{\circ}\text{C}$
- ▶ Aseptic

Sample beaker with cover							
Capacity ml	Dia. mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.	
125	52	74		380		7103-0125	N3

Aluminium bottle | light, unbreakable, seamless

Sealable wide-necked bottles



The aluminium bottle is particularly suited for storing, transport or sending substances and reference samples which have to be stored completely unaltered. Other properties: can be completely emptied without residues, odour-neutral, impervious to light, rustproof.

Sturdy bottle with sealing eyelets on the screw cap and the bottle. Particularly suited for sending samples. Seals provide increased sample authenticity. Easy to fill due to wide opening. Particularly suitable for viscous media, powder, granules and pastes.

- ▶ Pure aluminium (material AL 99.5)
- ▶ With tamper-evident screw cap made of PP with aluminium inner seal
- ▶ Suitable for food
- ▶ With UN approval (for 60-1200 ml)

- ▶ HDPE
- ▶ Leakproof
- ▶ Easy to fill due to wide-necked opening

Aluminium bottle

Capacity ml	Dia. mm	Height with cap mm	UN approval	Price €	Quantity scale from	Scale price €	Item no.	
38	35	70	no	387			0327-0038	N3
60	40	88	1B1/X/250	304			0327-0060	N3
120	57	97	1B1/X/250	143			0327-0120	N3
300	57	160	1B1/X/250	149			0327-0300	N3
600	74	192	1B1/X/250	84			0327-0600	N3
1200	88	248	1B1/X/250	130			0327-1200	N3

Sealable wide-necked bottles

Capacity ml	Container dia. mm	Neck dia. inside mm	Height with cap mm	Price €	Quantity scale from	Scale price €	Item no.	
250	64	26,5	118		50		0322-0250	N3
500	78	40	147		50		0322-0500	N3
1000	100	50	186		50		0322-1000	N3
2000	120	50	230		50		0322-2000	N3

Accessories

Description	Price €	Item no.
SampleSafe seal, red, 100 pieces		5399-2902 N2

Make connections – with Bürkle LaboPlast hose connectors



Bürkle offers a large portfolio of different hose connectors that are used to extend, connect, branch, join and repair hoses, etc.



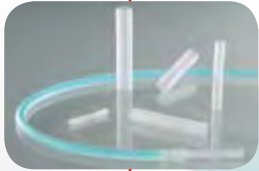
The ranges of application are diverse and thus the requirements for shape, size and material properties are broadly based.



We produce our LaboPlast hose connectors in many sizes and shapes (I, T, Y, X, L) to be able to also safeguard a flexible and safe solution and connection for demanding applications at all times.



We offer these connectors made of polypropylene as standard. However here we would like to point out our connectors made of PVDF (polyvinylidene fluoride).



Do you prefer moving images of our connectors? – No problem! Visit us at

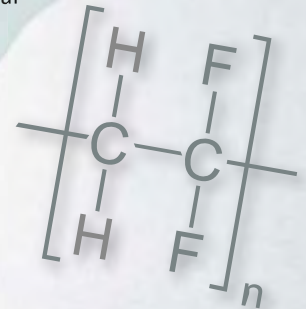
www.buerkle.de/videos

or simply scan the code opposite with your smartphone and select the films that you find interesting.

PVDF – for demanding applications

PVDF is a fluoropolymer with superior product properties:

- ▶ Highest chemical resistance
- ▶ High temperature resistance (up to 160 °C)
- ▶ Food industry approval
- ▶ Autoclavable
- ▶ UV-resistant

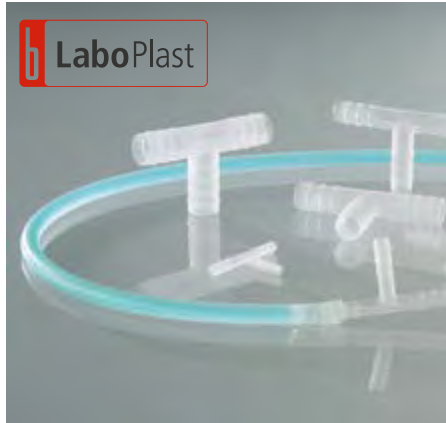


If you value high-quality and flexible solutions for demanding applications, test our unique connector made of PVDF.

Improve your connections – with Bürkle LaboPlast PVDF hose connectors!



T-connectors



Cylindrical T hose connector to connect hoses.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

T-connectors

Ma- terial	For dia. mm	Piec- es per pack	Price €	Quan- tity scale from	Scale price €	Item no.			
PP	3-5	10		20		8705-0004	N4		
PP	5-7	10		20		8705-0006	N4		
PP	7-9	10		20		8705-0008	N4		
PP	9-11	10		20		8705-0010	N4		
PP	11-13	10		20		8705-0012	N4		
PP	13-15	10		20		8705-0014	N4		
PVDF	3-5	10		20		8711-0004	N4		
PVDF	5-7	10		20		8711-0006	N4		
PVDF	7-9	10		20		8711-0008	N4		
PVDF	9-11	10		20		8711-0010	N4		
PVDF	11-13	10		20		8711-0012	N4		
PVDF	13-15	10		20		8711-0014	N4		

Y-connectors



Cylindrical Y hose connector to connect hoses.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

Y-connectors

Ma- terial	For dia. mm	Piec- es per pack	Price €	Quan- tity scale from	Scale price €	Item no.			
PP	3-5	10		20		8706-0004	N4		
PP	5-7	10		20		8706-0006	N4		
PP	6-8	10		20		8706-0007	N4		
PP	7-9	10		20		8706-0008	N4		
PP	9-11	10		20		8706-0010	N4		
PP	11-13	10		10		8706-0012	N4		
PP	13-15	10		10		8706-0014	N4		
PVDF	3-5	10		20		8712-0004	N4		
PVDF	5-7	10		20		8712-0006	N4		
PVDF	7-9	10		20		8712-0008	N4		
PVDF	9-11	10		20		8712-0010	N4		
PVDF	11-13	10		20		8712-0012	N4		
PVDF	13-15	10		10		8712-0014	N4		

Angled connectors



Cylindrical angle hose connector to connect hoses.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

Angled connectors

Mate- rial	For dia. mm	Piec- es per pack	Price €	Quan- tity scale from	Scale price €	Item no.			
PP	3-5	10		20		8707-0004	N4		
PP	5-7	10		20		8707-0006	N4		
PP	7-9	10		20		8707-0008	N4		
PP	9-11	10		20		8707-0010	N4		
PP	11-13	10		20		8707-0012	N4		
PP	13-15	10		20		8707-0014	N4		
PVDF	3-5	10		20		8713-0004	N4		
PVDF	5-7	10		20		8713-0006	N4		
PVDF	7-9	10		20		8713-0008	N4		
PVDF	9-11	10		20		8713-0010	N4		
PVDF	11-13	10		10		8713-0012	N4		
PVDF	13-15	10		20		8713-0014	N4		

Four-way-connectors



Cylindrical four-way hose connector to connect hoses.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

Four-way-connectors

Material	For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
PP	3-5	10		10		8708-0004	N4
PP	5-7	10		10		8708-0006	N4
PP	7-9	10		10		8708-0008	N4
PP	9-11	10		10		8708-0010	N4
PP	11-13	10		10		8708-0012	N4
PP	13-15	10		10		8708-0014	N4
PVDF	3-5	10		10		8717-0004	N4
PVDF	5-7	10		10		8717-0006	N4
PVDF	7-9	10		10		8717-0008	N4
PVDF	9-11	10		10		8717-0010	N4
PVDF	11-13	10		10		8717-0012	N4
PVDF	13-15	10		10		8717-0014	N4

Hose tubing connectors, straight



Cylindrical straight hose connectors for various hose sizes.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

Hose tubing connectors, straight

Material	For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
PP	3-5	10		20		8701-0004	N4
PP	5-7	10		20		8701-0006	N4
PP	7-9	10		20		8701-0008	N4
PP	9-11	10		20		8701-0010	N4
PP	11-13	10		20		8701-0012	N4
PP	13-15	10		20		8701-0014	N4
PVDF	3-5	10		20		8710-0004	N4
PVDF	5-7	10		20		8710-0006	N4
PVDF	7-9	10		20		8710-0008	N4
PVDF	9-11	10		20		8710-0010	N4
PVDF	11-13	10		20		8710-0012	N4
PVDF	13-15	10		20		8710-0014	N4

Hose tubing connectors



Conical, straight hose connectors for various hose sizes.

- ▶ PP
- ▶ Sterilisable

Hose tubing connectors

For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
3-5	10		10		8700-0406	N3
5-7	10		10		8700-0608	N3
7-10	10		10		8700-0810	N3
9-12	10		10		8700-1012	N3
11-14	10		10		8700-1214	N3
13-15	10		10		8700-1416	N3

Universal hose tubing connectors



Conical, straight hose connectors for universal use.

- ▶ PP, Temperature resistant up to +135°C max.
- ▶ PVDF, Temperature resistant up to +160°C max., highly resistant to chemicals
- ▶ Sterilisable

Universal tubing connectors

Material	For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
PP	4-17	10		10		8700-0417 N4
PVDF	4-17	10		20		8710-0417 N4



Reducing hose connectors



Reducing nozzles for the reduction from bigger to small hoses.

- ▶ PP
- ▶ Sterilisable

Reducing hose connectors

For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
4-8/ 8-12	10		10		8703-0408 N3
4-8/ 12-16	10		10		8703-0412 N3
8-12/ 12-16	10		10		8703-0812 N3



Hose couplings



Attachable, conical hose couplings for pressureless operation.

- ▶ PE

Hose couplings

For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
3-5	10		10		8704-0406 N3
5-7	10		10		8704-0608 N3
7-10	10		10		8704-0810 N3
9-12	10		10		8704-1012 N3
11-14	10		10		8704-1214 N3
13-16	10		10		8704-1416 N3



Non-return valves



Retaining valve with embossed directional arrow or printed in black. With conical nozzles. Various uses

- ▶ Resistant to compression max. 4 bar
- ▶ Operating temperature +0 to +40 °C
- ▶ With PP valve ball, on request also with ball made of stainless steel or PTFE

Non-return valves with conical inlet/outlet

For dia. mm	Print	Price €	Quantity scale from	Scale price €	Item no.
① 6-8	embossed	100			8714-0060 N4
① 8-10	embossed	100			8714-0080 N4
① 10-14	embossed	100			8714-0100 N4
② 6-8	black	100			8714-1006 N4
② 8-10	black	50			8714-1008 N4
② 10-14	black	100			8714-1010 N4

Magic Box



In this magic box, you can invariably find the appropriate hose connector you are looking for. Magic box includes 68 connectors: **Two of each** in sizes **4, 6, 8, 10, 12 and 14 mm**

- ▶ Straight hose connector Item No. 8701-
- ▶ T hose connector Item No. 8705-
- ▶ Y hose connector Item No. 8706-
- ▶ X hose connector Item No. 8708-
- ▶ Angle hose connector Item No. 8707-

Two of each for hoses from **4-17 mm**

- ▶ Universal hose connector Item No. 8700-0417

Two of each in sizes **4-8, 4-12, and 8-12 mm**

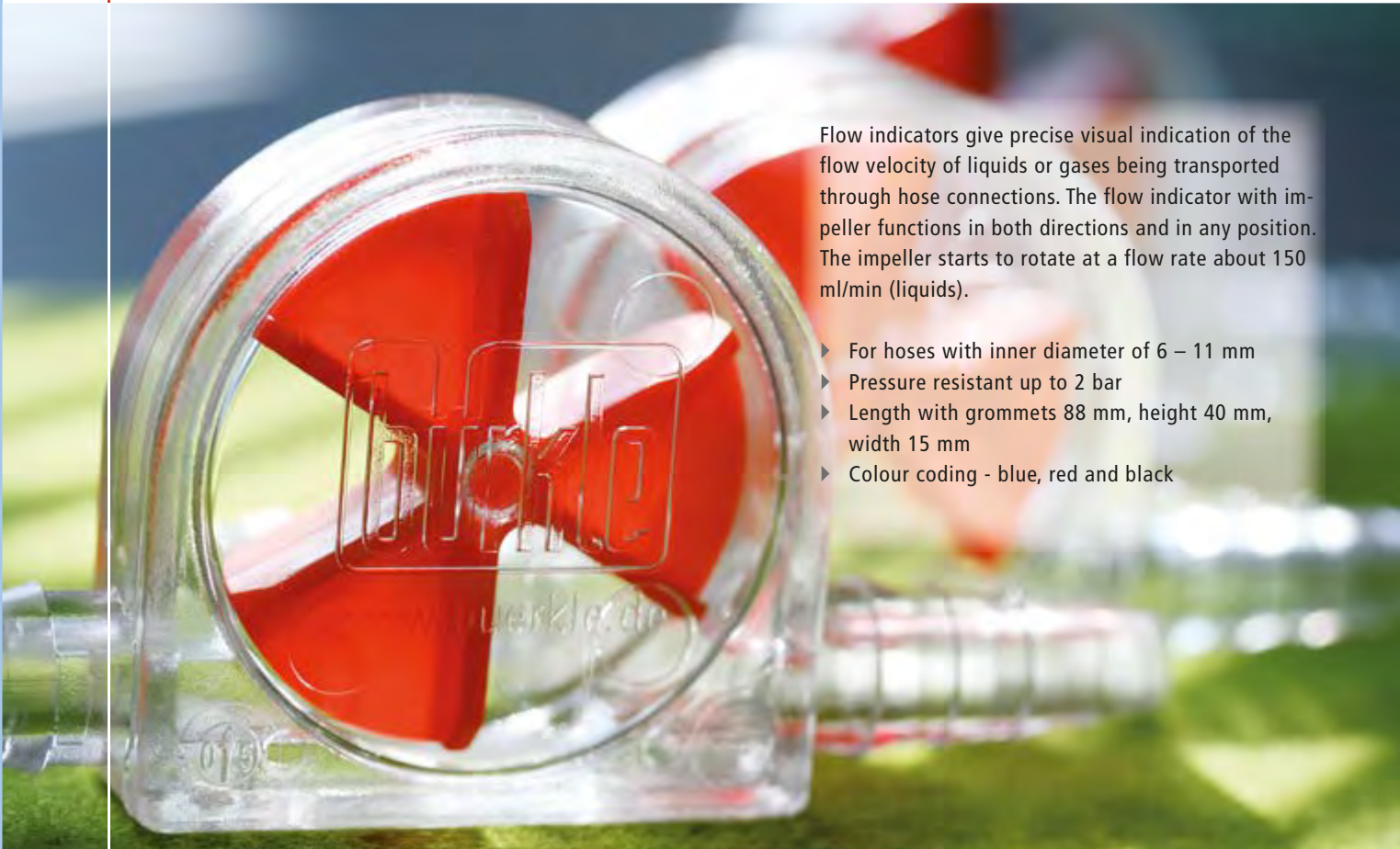
- ▶ Reducing hose connector Item No. 8703-
- ▶ PP, shatterproof and transparent

Magic Box

Price €	Quantity scale from	Scale price €	Item no.
	5		8715-1000 N4



Flow indicators



Flow indicators give precise visual indication of the flow velocity of liquids or gases being transported through hose connections. The flow indicator with impeller functions in both directions and in any position. The impeller starts to rotate at a flow rate about 150 ml/min (liquids).

- ▶ For hoses with inner diameter of 6 – 11 mm
- ▶ Pressure resistant up to 2 bar
- ▶ Length with grommets 88 mm, height 40 mm, width 15 mm
- ▶ Colour coding - blue, red and black

Flow indicators LiquiMobil SAN



LiquiMobil flow indicator made of SAN is mainly suitable for cooling systems and helps to reduce water consumption considerably because the cooling water flow can be adjusted better. Not suitable for aggressive substances.

- ▶ Operating temperature LiquiMobil SAN max. +30°C

Flow indicators LiquiMobil SAN

Colour	Price €	Quantity scale from	Scale price €	Item no.
red		10		8720-1002 N4
black		10		8720-1003 N4
blue		10		8720-1005 N4

Flow indicators CheMobil PMP



CheMobil made of PMP/TPX can be used for many substances due to its good chemical resistance. Not suitable for strong acids, alkalis and solvents. CheMobil can be steam sterilised.

- ▶ Operating temperature CheMobil PMP max. +60°C

Flow indicators CheMobil PMP

Colour	Price €	Quantity scale from	Scale price €	Item no.
red		10		8720-2002 N4
black		10		8720-2003 N4
blue		10		8720-2005 N4

stop-it hose clamps



The hose clip can be used wherever the flow in hoses with liquids or gases needs to be regulated or stopped.

Stepless flow regulation: With the hose clip stop-it's knurled screw, a stepless, delicate flow regulation or complete stop of the flow are possible, even for existing hose connections. The hose is compressed over a wide area against the sturdy steel hook in order to prevent it from being damaged.

stop-it with Easy-Click closure



Easy-Click closure - stop-it can be opened and closed in any position - without tiresome screwing on and off. High quality material - stop-it made from the heat resistant and chemical resistant plastic PVDF. The clamp is galvanised steel.

- ▶ PVDF and steel, zinc coated
- ▶ Temperature resistant up to 160 °C
- ▶ For flexible hoses with outer Ø up to 10 mm, 15 mm and 20 mm
- ▶ Available in four fresh colours

stop-it metal



The materials steel and aluminium ensure that the stop-it metal is extremely heat resistant and sturdy. The hose clip is available in four different sizes, for hose diameters up to max. 30 mm.

- ▶ Galvanised steel and aluminium
- ▶ For flexible hoses with outer Ø up to 10 mm, 15 mm 20 mm and 30 mm

*** Bulk prices**

stop-it with Easy-Click closure

For dia. mm	Colour	Price €	Quantity scale from	Scale price €	Item no.
to 10	red		50		8619-0102 N4
to 10	yellow		50		8619-0104 N4
to 10	blue		50		8619-0105 N4
to 10	green		50		8619-0106 N4
to 15	red		50		8619-0152 N4
to 15	yellow		50		8619-0154 N4
to 15	blue		50		8619-0155 N4
to 15	green		50		8619-0156 N4
to 20	red		50		8619-0202 N4
to 20	yellow		50		8619-0204 N4
to 20	blue		50		8619-0205 N4
to 20	green		50		8619-0206 N4

stop-it metal

For dia. mm	Price €	Quantity scale from	Scale price €	Item no.
up to 10		50		8619-0510 N4
up to 15		50		8619-0515 N4
up to 20		50		8619-0520 N4
up to 30		50		8619-0530 N4

Hose clamp Squeeze-Fix



The hose can be squeezed in phases or completely compressed, as required.

- ▶ Can be operated with one hand
- ▶ POM (white, sterilisable, does not rust, permanently elastic, hygienic)

Hose clamp Squeeze-Fix

For dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.	
1-5	25		100		8618-0001	N3
3-10	40		100		8618-0002	N3
6-15	55		100		8618-0003	N3

Hose clips POM



Hose clips made of Polyacetal (POM).

Hose clips POM

For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
6 - 6,5	10		10		8678-0006	N3
9 - 10	10		10		8678-0010	N3
10 - 11	10		10		8678-0011	N3
11 - 12	10		10		8678-0012	N3
12 - 14	10		10		8678-0014	N3
13 - 15	10		10		8678-0015	N3
15 - 17	10		10		8678-0017	N3
17 - 19	10		10		8678-0019	N3
18 - 20	10		10		8678-0020	N3
20 - 22	10		10		8678-0022	N3
23 - 25	10		10		8678-0025	N3

Worm-threaded hose clips



Hose clip sleeve made of stainless steel 1.4016, screw zinc coated, with screw thread.

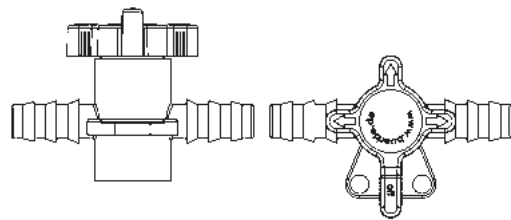
Worm-threaded hose clips stainless steel

For dia. mm	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.	
8-12	10		10		8677-0812	N3
10-16	10		10		8677-1016	N3
12-20	10		10		8677-1220	N3
16-27	10		10		8677-1625	N3
20-32	10		10		8677-2032	N3
25-40	10		10		8677-2540	N3

Two-way valves



Two and three-way valves are used for transfer of liquids or gases in order to release the flow, to block it or to change its direction.



Two-way valves								
Material	For dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.		
PP/PE	5-7	4		50		8605-0060	N4	
PP/PE	7-9	6		50		8605-0080	N4	
PP/PE	9-11	8		50		8605-0100	N4	
PP/PE	11-13	8		50		8605-0120	N4	
PVDF	5-7	4		50		8607-0060	N4	
PVDF	7-9	6		50		8607-0080	N4	
PVDF	9-11	8		50		8607-0100	N4	
PVDF	11-13	8		50		8607-0120	N4	

Three-way valves



- ▶ PVDF: excellent chemical resistance, transparent, suitable for food
- ▶ PP/PE: for industrial use, red/white
- ▶ Operating temperature: PVDF +0 up to +40 °C, PP/PE +5 up to +40 °C
- ▶ Resistant to compression max. 1 bar
- ▶ With mounting plate for easy installation

Three-way valves								
Material	For dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.		
PP/PE	5-7	4		50		8606-0060	N4	
PP/PE	7-9	6		50		8606-0080	N4	
PP/PE	9-11	8		50		8606-0100	N4	
PP/PE	11-13	8		50		8606-0120	N4	
PVDF	5-7	4		50		8608-0060	N4	
PVDF	7-9	6		50		8608-0080	N4	
PVDF	9-11	8		50		8608-0100	N4	
PVDF	11-13	8		50		8608-0120	N4	

Valves made of PTFE, two-way/three way



Two-way / three-way valves made of solid PTFE with hose nozzles. Resistant to chemicals. Very easy connection thanks to its excellent antifriction properties. Blue handles made of PP.

- ▶ Resistant to compression max. 1 bar
- ▶ Vacuum suitable up to 10^{-1} mmHg
- ▶ Autoclavable

Valves made of PTFE, two-way and three way

Model	For dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.	
three-way valve	4,5	2		10		8610-0001	N4
three-way valve	6,8	3		10		8610-0003	N4
three-way valve	10	4		10		8610-0006	N4
two-way valve	4,5	2		10		8610-0010	N4
two-way valve	6,8	3		10		8610-0012	N4
two-way valve	10	4		10		8610-0015	N4

Hose tubing stop-cock



Simple reflux nozzle with two-sided hose nozzle.

- ▶ HDPE natural
- ▶ Resistant to acids and chemicals
- ▶ Pressure resistant up to 0.3 bar

Hose tubing stop-cock

For dia. mm	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.	
9-11	7	85		50		8614-0007	N4
12-15	9	97		50		8614-0009	N4

Non-return valves with conical inlet/outlet



Retaining valve with embossed directional arrow or printed in black. With conical nozzles. Various uses.

- ▶ Resistant to compression max. 4 bar
- ▶ Operating temperature +0 to +40 °C
- ▶ With PP valve ball, on request also with ball made of stainless steel or PTFE

Non-return valves with conical inlet/outlet

For dia. mm	Print	Price €	Quantity scale from	Scale price €	Item no.
① 6-8	embossed		100		8714-0060 N4
① 8-10	embossed		100		8714-0080 N4
① 10-14	embossed		100		8714-0100 N4
② 6-8	black		100		8714-1006 N4
② 8-10	black		50		8714-1008 N4
② 10-14	black		100		8714-1010 N4

Non-return valves PP



Valve made of PP and POM, seal made of EPDM, springs made of stainless steel 1.4401.

- ▶ Max. operating pressure 6 bar (at + 20°C)
- ▶ Max. operating temperature 80°C
- ▶ Pressure difference 12 mbar

Non-return valves PP

Thread	Price €	Quantity scale from	Scale price €	Item no.
1/2"		5		8540-0012 N3

Rapid couplings



Fast and safe connection for liquids, gases, compressed air and vacuum. Rapid couplings are the ideal when connecting and separating hoses, machines, apparatus, containers, etc. Top quality, with tested reliability, small space requirement, maximum possible flow, easy operation (single handed operation) and an elegant design distinguish the rapid couplings. They fulfil the most stringent requirements. The couplings are available in two different materials: POM (Polyoxymethylene) and PP (Polypropylene). The rapid couplings are available with a hose nozzle, hose screw joint, thread connector or as a built-in component for control panels, with or without stop-valve respectively.

The secure O-ring guarantees that rapid couplings are leakproof. All the couplings (female connections) and nipples (male connections) that are within the same flow range are interconnecting.

- ▶ Spring/lock Stainless steel V4A

Body POM:

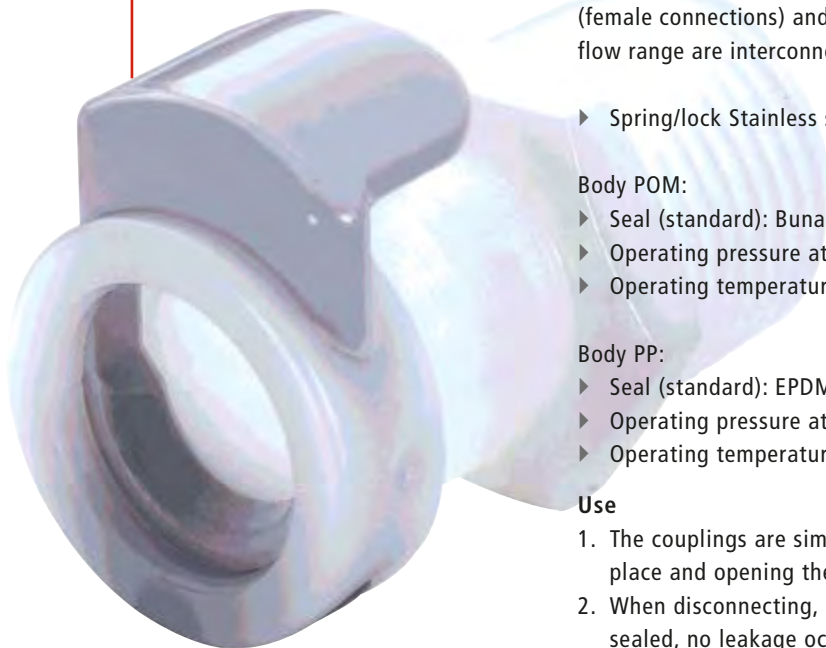
- ▶ Seal (standard): Buna-N
- ▶ Operating pressure at 20 °C: with vacuum up to 10 bar
- ▶ Operating temperature: -40 °C to +80 °C

Body PP:

- ▶ Seal (standard): EPDM
- ▶ Operating pressure at 20 °C: up to 8 bar
- ▶ Operating temperature: 0 °C to +110 °C

Use

1. The couplings are simply connected to each other, automatically clicking into place and opening the valves.
2. When disconnecting, (one handed operation), the valves are automatically sealed, no leakage occurs.



Hose couplings, 100 % plastic (POM), nw 6.4 mm



Hose couplings, 100 % plastic (POM), nw 6.4 mm, complete								
Model	Hose inner dia. mm	Connector type	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
coupling, complete, without valve	6,4	hose nozzle	6,4	54		25		8780-1040 N3
coupling, complete, without valve	9,5	hose nozzle	6,4	54		25		8780-1060 N3



Hose couplings, 100 % plastic (POM), nw 6.4 mm, male connections, hose nipples with hose nozzles								
Model	Hose inner dia. mm	Connector type	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
nipple, without valve	6,4	hose nozzle	6,4	36		25		8782-1040 N3
nipple, without valve	9,5	hose nozzle	6,4	36		25		8782-1060 N3



Hose couplings, 100 % plastic (POM), nw 6.4 mm, male connections, angled nipples with hose nozzle								
Model	Hose inner dia. mm	Connector type	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
angled-nipple, without valve	9,5	hose nozzle	6,4	23		25		8783-1060 N3



Hose couplings, 100 % plastic (POM), nw 6.4 mm, female connections, hose couplings with hose nozzles								
Model	Hose inner dia. mm	Connector type	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
coupling, without valve	6,4	hose nozzle	6,4	34		25		8781-1040 N3
coupling, without valve	9,5	hose nozzle	6,4	34		25		8781-1060 N3



Hose couplings, 100 % plastic (POM), nw 6.4 mm, female connections, hose couplings with conical external thread								
Model	Thread	Connector type	Nominal width mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
coupling, without valve	3/8" NPT	thread	6,4	35		25		8783-1062 N3

Rapid couplings, nw 3.2 mm, female connections



Rapid couplings, nw 3.2 mm, female connections, hose couplings with conical external thread

Thread	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1/8" NPT	POM	with valve	26		25		8740-1122 N3
1/4" NPT	POM	with valve	28		25		8740-1142 N3
1/4" BSP	POM	with valve	28		25		8740-1141 N3
1/8" NPT	PP	with valve	26		25		8740-2022 N3



Rapid couplings, nw 3.2 mm, female connections, hose couplings with hose nozzles

Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
3,2	POM	with valve	42		25		8741-1202 N3
4,8	POM	with valve	47		25		8741-1203 N3
6,4	POM	with valve	47		25		8741-1204 N3
3,2	POM	without valve	42		25		8741-1002 N3
4,8	POM	without valve	47		25		8741-1003 N3
6,4	POM	without valve	47		25		8741-1004 N3
3,2	PP	with valve	42		25		8741-2002 N3



Rapid couplings, nw 3.2 mm, female connections, hose couplings with hose screw-joint

Hose inner x outer dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	with valve	44		25		8742-1104 N3
4 x 6	PP	with valve	44		25		8742-2004 N3



Rapid couplings, nw 3.2 mm, female connections, for plate mounting with hose nozzle

Hose inner dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1,6	POM	with valve	13	36		25		8743-1101 N3
3,2	POM	with valve	13	42		25		8743-1102 N3
4,8	POM	with valve	13	47		25		8743-1103 N3
6,4	POM	with valve	13	47		25		8743-1104 N3
1,6	PP	with valve	13	36		25		8743-2001 N3
6,4	PP	with valve	13	47		25		8743-2004 N3



Rapid couplings, nw 3.2 mm, female connections, for plate mounting with hole screw-joint

Plate borehole dia. mm	Material	Model	Hose inner x outer dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
13	POM	with valve	4 x 6	44		25		8744-1104 N3
13	POM	without valve	4 x 6	44		25		8744-1004 N3
13	PP	with valve	4 x 6	44		25		8744-2004 N3

Rapid couplings, nw 3.2 mm, male connections



Rapid couplings, nw 3.2 mm, male connections, hose nipples with external thread



Thread	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1/8" NPT	POM	without valve	15		25		8750-1022 N3
1/8" BSP	POM	with valve	22		25		8750-1121 N3

Rapid couplings, nw 3.2 mm, male connections, hose nipples with hose nozzles



Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1,6	POM	without valve	20		25		8751-1001 N3
3,2	POM	without valve	27		25		8751-1002 N3
4,8	POM	without valve	32		25		8751-1003 N3
6,4	POM	without valve	32		25		8751-1004 N3
1,6	POM	with valve	34		25		8751-1101 N3
3,2	POM	with valve	42		25		8751-1102 N3
4,8	POM	with valve	44		25		8751-1103 N3
6,4	POM	with valve	40		25		8751-1104 N3
1,6	PP	with valve	34		25		8751-2101 N3
3,2	PP	with valve	43		25		8751-2102 N3
6,4	PP	with valve	40		25		8751-2104 N3

Rapid couplings, nw 3.2 mm, male connections, hose nipple with hose screw-joint



Hose inner x outer dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	without valve	37		25		8752-1004 N3
4 x 6	POM	with valve	37		25		8752-1104 N3
2 x 4	POM	with valve	27		25		8752-1142 N3
4 x 6	PP	with valve	37		25		8752-2104 N3

Rapid couplings, nw 3.2 mm, male connections, for plate mounting with hose nozzle



Hose inner dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
3,2	POM	with valve	13	41		25		8753-1102 N3
4,8	POM	with valve	13	46		25		8753-1103 N3
6,4	POM	with valve	13	46		25		8753-1104 N3

Rapid couplings, nw 3.2 mm, male connections, for plate mounting with hose screw-joint



Hose inner x outer dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	with valve	13	43		25		8754-1104 N3

Rapid couplings, nw 3.2 mm, male connections, angled nipples with hose nozzle



Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
3,2	POM	with valve	28		25		8755-1102 N3
6,4	POM	with valve	28		25		8755-1104 N3
6,4	PP	with valve	28		25		8755-2004 N3

Rapid couplings, nw 6.4 mm, female connections



Rapid couplings, nw 6.4 mm, female connections, hose couplings with conical external thread

Thread	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1/4" BSP	POM	without valve	29		25		8760-1041 N3
1/4" NPT	POM	without valve	29		25		8760-1042 N3
3/8" BSP	POM	without valve	29		25		8760-1061 N3
1/4" BSP	POM	with valve	29		25		8760-1141 N3
1/4" NPT	POM	with valve	29		25		8760-1142 N3
1/4" NPT	PP	with valve	29		25		8760-2141 N3
3/8" NPT	PP	with valve	29		25		8760-2161 N3



Rapid couplings, nw 6.4 mm, female connections, hose couplings with hose nozzles

Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
6,5	POM	without valve	50		25		8761-1040 N3
8	POM	without valve	50		25		8761-1050 N3
9,5	POM	without valve	50		25		8761-1060 N3
6,5	POM	with valve	50		25		8761-1140 N3
8	POM	with valve	50		25		8761-1150 N3
9,5	POM	with valve	50		25		8761-1160 N3
6,5	PP	with valve	50		25		8761-2140 N3
9,5	PP	with valve	50		25		8761-2160 N3



Rapid couplings, nw 6.4 mm, female connections, for plate mounting with hose nozzle

Hose inner dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
6,5	POM	without valve	19	50		25		8763-1040 N3
8	POM	without valve	19	50		25		8763-1050 N3
6,5	POM	with valve	19	50		25		8763-1140 N3
8	POM	with valve	19	50		25		8763-1150 N3
9,5	POM	with valve	19	50		25		8763-1160 N3
9,5	PP	with valve	19	50		25		8763-2160 N3



Rapid couplings, nw 6.4 mm, female connections, hose couplings with hose screw-joint

Hose inner x outer dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	with valve	47		25		8762-1140 N3
8 x 10	POM	with valve	50		25		8762-1310 N3
6 x 8	POM	with valve	50		25		8762-1380 N3

Rapid couplings, nw 6.4 mm, male connections



Rapid couplings, nw 6.4 mm, male connections, hose nipples with external thread

Thread	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
1/4" NPT	POM	with valve	38		25		8770-1142 N3
1/4" BSP	POM	without valve	32		25		8770-1041 N3
1/4" NPT	POM	without valve	32		25		8770-1042 N3
1/4" NPT	PP	with valve	38		25		8770-2142 N3



Rapid couplings, nw 6.4 mm, male connections, hose nipples with hose nozzles

Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
6,5	POM	without valve	32		25		8771-1040 N3
8	POM	without valve	32		25		8771-1050 N3
9,5	POM	without valve	32		25		8771-1060 N3
6,5	POM	with valve	47		25		8771-1140 N3
8	POM	with valve	47		25		8771-1150 N3
9,5	POM	with valve	42		25		8771-1160 N3
6,5	PP	with valve	47		25		8771-2140 N3
9,5	PP	with valve	42		25		8771-2160 N3



Rapid couplings, nw 6.4 mm, male connections, for plate mounting with hose nozzle

Hose inner dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
6,5	POM	without valve	19	35		25		8773-1040 N3
9,5	POM	without valve	19	47		25		8773-1060 N3
6,5	POM	with valve	19	49		25		8773-1140 N3
8	POM	with valve	19	49		25		8773-1150 N3
9,5	POM	with valve	19	49		25		8773-1160 N3



Rapid couplings, nw 6.4 mm, male connections, hose nipple with hose screw-joint

Hose inner x outer dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	with valve	45		25		8772-1140 N3
6 x 8	POM	with valve	43		25		8772-1380 N3
8 x 10	POM	with valve	43		25		8772-1310 N3
4 x 6	POM	without valve	35		25		8772-1280 N3



Rapid couplings, nw 6.4 mm, male connections, for plate mounting with hose screw-joint

Hose inner x outer dia. mm	Material	Model	Plate borehole dia. mm	Length mm	Price €	Quantity scale from	Scale price €	Item no.
4 x 6	POM	with valve	19	45		25		8774-1140 N3
6 x 8	POM	with valve	19	49		25		8774-1380 N3



Rapid couplings, nw 6.4 mm, male connections, angled nipples with hose nozzle

Hose inner dia. mm	Material	Model	Length mm	Price €	Quantity scale from	Scale price €	Item no.
6,5	POM	without valve	31		25		8775-1040 N3
9,5	POM	without valve	31		25		8775-1060 N3
9,5	POM	with valve	31		25		8775-1160 N3
6,5	PP	with valve	31		25		8775-2140 N3

Threaded fittings



▶ PP

Hose nozzle with strong outer thread.



▶ Hose nozzle, PP
▶ Seal, EPDM

Hose nozzle with cap nut, inner thread.



▶ PP

Hose angle bracket, 90°, with strong outer thread.



▶ Hose angle bracket, PP
▶ Seal, EPDM

Hose angle bracket, 90°, with cap nut, inner thread and reducing nozzle.

Tube nozzles, fixed, external thread

Thread	Nozzle dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.			
3/8"	12	7,5		20		8545-3812 N3			
1/2"	13	8		20		8545-0012 N3			
1/2"	16	10		20		8545-1216 N3			
1/2"	20	13		20		8545-1220 N3			
3/4"	12	7,5		20		8545-3412 N3			
3/4"	16	10		20		8545-0034 N3			
3/4"	20	13		20		8545-3420 N3			
1"	25	19		10		8545-0100 N3			

Tube nozzles, with cap nut

Thread	Nozzle dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.			
1/2"	13	9		20		8546-0012 N3			
1/2"	16	10		20		8546-1216 N3			
3/4"	10	6		20		8546-3410 N3			
3/4"	12	7,5		20		8546-3412 N3			
3/4"	13	8,5		20		8546-3413 N3			
3/4"	16	10		20		8546-0034 N3			
3/4"	20	13		20		8546-3420 N3			
1"	25	20		10		8546-0100 N3			

Tube bend, fixed, external thread

Thread	Nozzle dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.			
1/2"	12	7,5		20		8547-0012 N3			
1/2"	16	11		20		8547-1216 N3			
1/2"	20	15		20		8547-1220 N3			
3/4"	12	7,5		20		8547-0034 N3			
3/4"	20	15		20		8547-3420 N3			
3/4"	22	17		20		8547-3422 N3			
1"	25	19,5		10		8547-0100 N3			

Tube bend, with cap nut

Thread	Nozzle dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.			
1/2"	12	7,5		20		8548-0012 N3			
3/4"	12	7		20		8548-3412 N3			
3/4"	16	11		20		8548-0034 N3			
3/4"	20	15,5		20		8548-3420 N3			
1"	25	19,5		10		8548-0100 N3			

Threaded fittings



▶ PP

Hose angle bracket, 90°, with cap nut, inner thread and reducing nozzle.

Tube bend, with cap nut, white

Thread	Outlet dia. mm	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
M29x1,75	9	15		20		8548-0020 N3
M36x3	10	20		20		8548-0025 N3
M42x3	11	25		10		8548-0030 N3



▶ PP

Container connector with outer thread, complete with EPDM seals, for easy mounting of thread in the sides of containers.

Container connection, white

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	13,5		20		8533-0012 N3
3/4"	18		10		8533-0034 N3
1"	24		20		8533-0100 N3



▶ PE

Hexagonal nut with inner thread.

Hexagonal nuts

Thread	Price €	Quantity scale from	Scale price €	Item no.
1/2"		10		8537-0012 N3
3/4"		10		8537-0034 N3
1"		10		8537-0100 N3
2"		10		8537-0200 N3



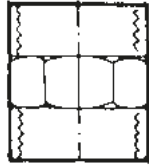
▶ PE

Flat seals made of Polyethylene, transparent fitting outer or inner thread.

Flat seals, PE

Thread	Model	Pieces per pack	Price €	Quantity scale from	Scale price €	Item no.
1/2"	fits outer thread	10		10		8538-0012 N3
3/4"	fits outer thread	10		10		8538-0034 N3
1"	fits outer thread	10		10		8538-0100 N3
2"	fits outer thread	10		10		8538-0200 N3
1/2"	fits inner thread	10		10		8539-0012 N3
3/4"	fits inner thread	10		10		8539-0034 N3
1"	fits inner thread	10		10		8539-0100 N3

Threaded fittings



Socket with inner thread.

► PP

Socket, inner thread

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	19		10		8501-0012 N3
3/4"	23		10		8501-0034 N3
1"	28,5		10		8501-0100 N3

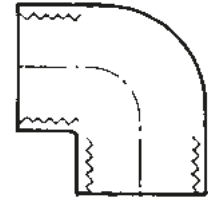


Nipple with outer thread.

► PP

Nipple, outer thread

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	13,5		10		8505-0012 N3
3/4"	18		10		8505-0034 N3
1"	23,5		10		8505-0100 N3

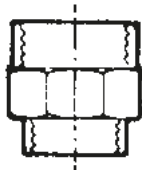


Angle bracket 90° with inner thread

► PP

90° bend, inner thread

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	17,5		10		8515-0012 N3
3/4"	23		10		8515-0034 N3
1"	28,5		10		8515-0100 N3

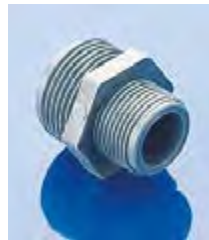


Socket, reduced with inner thread.

► PP

Socket, reduced

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"-3/4"	17,5		10		8502-1234 N3
3/4"-1"	23		10		8502-3410 N3

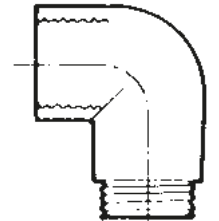


Nipple, reduced, with outer thread.

► PP

Nipple, reduced

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"-3/4"	13,5		10		8506-1234 N3
3/4"-1"	18		10		8506-3410 N3



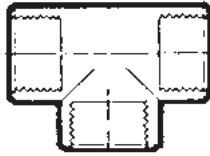
Angle bracket 90° with inner / outer thread.

► PP

90° bend, inner/outer thread

Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	14		10		8516-0012 N3
3/4"	19		10		8516-0034 N3
1"	24,5		10		8516-0100 N3

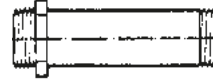
Threaded fittings



T piece with inner thread.

► PP

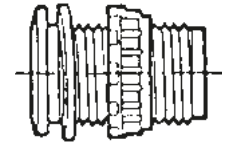
T-piece					
Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	17,5	10			8525-0012 N3
3/4"	23	10			8525-0034 N3
1"	28,5	10			8525-0100 N3



Tube extension with outer thread. 8520-0012, -0034 length 152 mm, 8520-0100 length 162 mm.

► PP

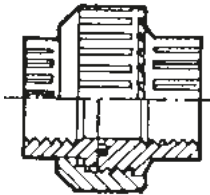
Tube extensions					
Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	12,5	10			8520-0012 N3
3/4"	18	10			8520-0034 N3
1"	23,5	20			8520-0100 N3



Container connector with outer thread, complete with EPDM seals, for easy mounting of thread in the sides of containers.

► PP

Container connection					
Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	13,5	10			8530-0012 N3
3/4"	18	10			8530-0034 N3
1"	24	10			8530-0100 N3



Screw joint with inner thread, enables easy disconnection of tube connections.

► PP

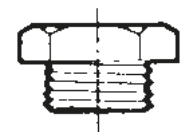
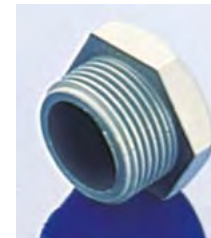
Screw joint					
Thread	Nominal width mm	Price €	Quantity scale from	Scale price €	Item no.
1/2"	17,5	10			8510-0012 N3
3/4"	21,5	10			8510-0034 N3
1"	26,5	10			8510-0100 N3



Closing cap with inner thread.

► PP

Cap				
Thread	Price €	Quantity scale from	Scale price €	Item no.
1/2"	10			8535-0012 N3
3/4"	10			8535-0034 N3
1"	10			8535-0100 N3



Threaded cap outer thread.

► PP

Stopper				
Thread	Price €	Quantity scale from	Scale price €	Item no.
1/2"	10			8536-0012 N3
3/4"	10			8536-0034 N3
1"	10			8536-0100 N3

VacuMan vacuum pump

Hand pump can be operated with one hand to create a vacuum or pressure, independent of a power supply (e.g. vacuum filtration, taking samples, dissipation of desiccators). Maintenance-free, self-lubricating, mainly corrosion resistant. Connection for hoses with 6.4 mm inner Ø. Available in PVC or aluminium for heavy duty.



- ▶ With or without gauge
- ▶ Sampling set with suction hose and sample container and adapter set for hoses from 5 to 14 mm available as accessory

VacuMan vacuum or pressure pump



- ▶ With gauge
- ▶ Adapter set for hoses from 5 to 14 mm available as accessory

VacuMan vacuum pump

Pressure gauge	Stroke approx. ml	Material	Vacuum mbar	Price €	Item no.	
no	32	PVC	- 850		5620-0360	N3
yes	16	PVC	- 850		5620-1180	N3
yes	32	PVC	- 850		5620-1360	N3

Accessories

Description	Price €	Item no.
Adapter set for hoses from 5 to 14 mm		5620-0010 N3
Sampling set with suction hose and sample container		5620-0020 N3

VacuMan vacuum or pressure pump

Pressure gauge	Material	Stroke approx. ml	Vacuum mbar	Pressure max. bar	Price €	Item no.		
yes	PVC	16	- 850	+ 2		5620-2180	N3	
yes	aluminium	16	- 850	+ 2		5620-2181	N3	

Accessories

Description	Price €	Item no.
Adapter set for hoses from 5 to 14 mm		5620-0010 N3
Sampling set with suction hose and sample container		5620-0020 N3

Water-jet pump



- ▶ PP, PTFE, FKM
- ▶ Continuous use temperature max. 80°C
- ▶ Incl. reducing piece to 1/2"

The water jet pump is used for withdrawing liquids and gases, and for creating a vacuum. Simple operation and easy cleaning. Very low water consumption, constant pressure and high suction.

Suction tube connection: Olive 6 – 9 mm outer Ø, screw cap GL 14.
Water consumption at 3.5 bar flow pressure and 12°C water temperature: approx. 190 l/hour at 3.5 bar (absolute). 6 l of water are needed to evacuate a 1 l pressure vessel from normal pressure to final pressure.

Suction capacity at 3.5 bar flow pressure and 12°C water temperature: 400 l/h evacuation time for a 1 l pressure vessel from normal pressure to 100 mbar: 60 sec. (± 10 sec.).

Final pressure at 3.5 bar flow pressure and 12°C water temperature: < 16 mbar.

The vacuum connection can be unscrewed and supplied adapters provide a variety of connection options to the water supply.

Water-jet pump			
Price €	Quantity scale from	Scale price €	Item no.
	10		9668-0200 N3
Accessories			
Description	Price €	Item no.	
Reducing adapter 3/8"		9668-0010	N3
Reducing adapter M 22 x 1 (perlator thread)		9668-0011	N3

AirJet Mini vacuum pump/compressor



The AirJet Mini single-head membrane vacuum pump is suitable for a variety of applications in the laboratory and industry. The dry running membrane vacuum pump is able to pump, compact and evacuate 100% oil-free, which means it does not distort results or add impurities, and can also be used as a compressor.

The AirJet Mini is used to pump and evacuate air and neutral or slightly aggressive or corrosive gases and vapours.

- ▶ Weight 1.9 kg, dimensions LxWxH 164/90/141 mm
- ▶ Hose connection ID 4 mm
- ▶ Maintenance-free, environmentally friendly
- ▶ High level of gas tightness
- ▶ Very quiet with low vibrations

! Attention! Make sure to pay attention to the "List of Chemical Resistance"!



① AirJet Mini membrane vacuum pump/compressor					
Model	Pump capacity approx. l/min	Vacuum mbar	Pressure max. bar	Price €	Item no.
Membrane made of EPDM	6	100	2,4		5625-2000 N2
Membrane made of PTFE	5,5	160	2,5		5625-2001 N2
Accessories					
Description				Price €	Item no.
② AirJet Mini fine regulation head					5625-2002 N2
③ AirJet Mini sound absorber					5625-2003 N2

Desiccator



Desiccators made of plastic, break resistant, lightweight and suitable for vacuums. Stopcock suitable for vacuums up to 980 mbar. Base and desiccator plate made out of Polypropylene. Lid is crystal clear Polycarbonate with a non-return valve and a venting valve. O-ring seal made of Polychlorobutadiene-rubber. Continuous temperature max. + 60 °C.

- ▶ Hose connection fits hoses with inner Ø 8.5 mm
- ▶ Delivery incl. O-ring
- ▶ Perforated plate and additional O-rings available as accessories

Desiccator

Inner dia. mm	Outer dia. mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.
150	175	190		5		9791-0150 N3
200	235	230		5		9791-0200 N3
250	285	300		5		9791-0250 N3

Accessories

Description	Price €	Item no.
Perforated plates for desiccator for i.d. 150 mm		9791-0151 N3
Perforated plates for desiccator for i.d. 200 mm		9791-0201 N3
Perforated plates for desiccator for i.d. 250 mm		9791-0251 N3
O-ring for desiccator for i.d. 150 mm		9791-0152 N3
O-ring for desiccator for i.d. 200 mm		9791-0202 N3
O-ring for desiccator for i.d. 250 mm		9791-0252 N3

Mercury collector



Bürkle's mercury collector enables the easy collection of spilt mercury, which can then be used again. The mercury collector is composed of a tub with a screw cap lid that has a special plastic foam inserted. On pressing this foam gently on the spilt mercury, the foam's pores are opened and the mercury globules are absorbed. The cap is then screwed on the tub, the globules are released again and fall through the perforated separation into the tub.

Mercury collector

Price €	Quantity scale from	Scale price €	Item no.
	10		9789-0001 N4

Accessories

Description	Price €	Item no.
Spare plastic foam insert for mercury collector		9789-0002 N4

Eyes Fresh mini eyewash station



Mini eyewash station ideal for the lab, filling stations or all work places where aggressive substances are used. Eyes Fresh can be attached to any standard cold water tap. For normal use of the tap, just press the button and the function changes back from the eye wash (returns automatically to eyewash-function when the tap is closed). Can be fitted onto taps with M22x1, 1/2" or 3/8" outer thread.

Eyes Fresh mini eyewash station



Model	Price €	Quantity scale from	Scale price €	Item no.
Press button for normal use		5		2515-0100 N4

Eye rinsing bottle



Empty bottle for 600 ml contents, leakproof due to valve and dust protection cap. Instructions printed on (in German language), made of transparent PE.

Eye rinsing bottle



Price €	Quantity scale from	Scale price €	Item no.
	10		2507-2000 N3

Wall fixture

Price €	Quantity scale from	Scale price €	Item no.
	10		2507-2001 N3

HotGrip



Hand protection made of silicone rubber highly resistant to cold and heat. Protects fingers and hands from burns and freezing when working with apparatus which has extreme temperatures. HotGrip is resistant to temperatures from $-50\text{ }^{\circ}\text{C}$ to $+200\text{ }^{\circ}\text{C}$ (briefly up to $+250\text{ }^{\circ}\text{C}$). Deep frozen, hot or even boiling substances and apparatus can be safely handled and positioned. Silicone rubber is extremely elastic and slip-proof, so that even smooth surfaced apparatus such as hot glass flasks can be securely gripped.


HotGrip						
Model	Colour	Price €	Quantity scale from	Scale price €	Item no.	
for the whole hand	red		10		9768-0001 N3	
for thumb and one finger	white		10		9768-0002 N3	
for thumb and 2 to 3 fingers	white		10		9768-0003 N3	

Rubiflex protective gloves



With short or long gauntlet. Safe working with fats, mineral oils, solvents and many acids and alkalis.

- ▶ Made from nitrile rubber
- ▶ Very flexible, soft to the touch
- ▶ High abrasion and cut resistance
- ▶ Comfortable cotton interlock interior
- ▶ To standard EN 374

 Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Rubiflex protective gloves							
Model	Length cm	Price €	Quantity scale from	Scale price €	Item no.		
standard	37		10		2507-0002 N3		
long wrist	60		10		2507-0003 N3		

SnowPack® dry ice machine | - 79 °C cryogenic cooling on-tap



SnowPack® enables you to obtain a - 79 °C dry ice tablet weighing 50 or 250 g within a few moments, without complicated technology and without electricity! You can therefore obtain low-cost cooling to very low temperatures at any time you like.

SnowPack® is often used in hospitals, universities, schools, institutes, laboratories, in the chemical industry and in materials testing facilities.

Examples of use: Lowering the temperature in cooling baths or cold traps, pre-cooling tissue samples, ensuring safe transport or embedding biological substances, freezing blood and tissue samples, studies in chemistry, physics and materials technology, etc. Dry ice is easy to handle, odourless and flavourless. The SnowPack® dry ice machine can be installed on any commercial CO₂-bottle with a standpipe (without pressure

regulator) (thread W 21.80 x 1/14" according to DIN 477-1 No. 6). These often exist in many production facilities and laboratories anyway. If this is not the case, a bottle can be rented for a small price from a local specialist gas distributor.

The use of SnowPack® is easy:

1. Simply screw SnowPack® onto a CO₂ bottle with standpipe
2. Open the valve, CO₂ gas flows into the SnowPack® and crystallises to dry ice
3. Open the clamp
4. Take out the dry ice pellet

- ▶ Ideal cooling media for sample transport
- ▶ Performance depends on room temperature and pressure



SnowPack® dry ice machine

Model	Tablet dia. x H mm	Weight g	Gas escape time ca. min	Tablets per 22 kg bottle	Price €	Item no.
SnowPack® 50	50 x 30	50	0,5	approx. 90		9805-0030 N4
SnowPack® 250	80 x 60	250	1	approx. 16		9805-0200 N4

Standard bungs silicone



The bungs are transparent, chemically-biologically neutral, food-safe according to BfR Recommendation XV and FDA § 177.2600.

- ▶ Temperature resistant from -60 °C to +200 °C, briefly to +230 °C
- ▶ Sterilisable
- ▶ Non-toxic

Standard bungs silicone rubber



Dia. bot-tom mm	Dia. top mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.
5	9	20		100		9764-0610 N3
8	12	20		100		9764-0913 N3
10,5	14,5	20		100		9764-1115 N3
14	18	20		100		9764-1418 N3
17	22	25		100		9764-1621 N3
18	24	30		100		9764-1924 N3
21	27	30		100		9764-2227 N3
26	32	30		100		9764-2531 N3
29	35	30		100		9764-2834 N3

Standard bungs



Laboratory standard bung made of PVC with good chemical resistance against acids and alkalis.

- ▶ PVC, soft, red



! Attention! Make sure to pay attention to the "List of Chemical Resistance"!

Standard bungs



Dia. bot-tom mm	Dia. top mm	Height mm	Price €	Quantity scale from	Scale price €	Item no.
7	10	18		100		9763-0610 N3
9	13	20		100		9763-0913 N3
11	15	20		100		9763-1115 N3
14	18	20		100		9763-1418 N3
16	21	24		100		9763-1621 N3
19	24	25		100		9763-1924 N3
22	27	24		100		9763-2227 N3
25	31	29		100		9763-2531 N3
28	34	30		100		9763-2834 N3
31	38	33		100		9763-3138 N3
34	41	35		100		9763-3441 N3
42	49	34		100		9763-4249 N3
46	53	39		100		9763-4654 N3

Bungs PE



Stopper made of PE, hollow with sealing rings and octagonal top.

- ▶ PE

Bungs PE



GGJ	Dia. bot-tom mm	Dia. top mm	Price €	Quantity scale from	Scale price €	Item no.
7/16	5,9	7,5		100		9760-0716 N3
10/19	8,2	10		100		9760-1019 N3
12/21	10,4	12,5		100		9760-1221 N3
14/23	12,1	14,5		100		9760-1423 N3
19/26	16,4	19		100		9760-1926 N3
24/29	21,1	24		100		9760-2429 N3
29/32	25,8	29		100		9760-2932 N3
34/35	31	34,5		100		9760-3435 N3
45/40	41	45		100		9760-4045 N3

fish-clip



Compression-type bung made of silicone



Compression-type fitting



Compression-type fitting with NS core

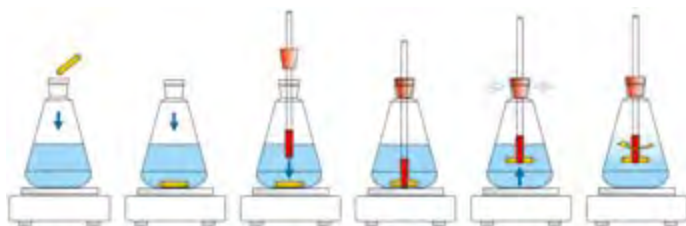
With fish-clip cell cultures, abrasive media and other liquids that are sensitive to mechanical stress are gently stirred. No disruption of biocatalysts such as enzymes or cells. No scratching the vessel base, no broken vessels resulting from magnetic stirrer bars "jumping about". Also suitable for narrow vessel openings. fish-clip can be used for gentle stirring in any type of vessel such as beakers, bottles, Erlenmeyer and round-bottom flasks.

- ▶ PVDF, autoclavable, excellent chemical resistance
- ▶ Rotor 15 mm Ø
- ▶ Gas tight
- ▶ Support rod length 250 mm
- ▶ Incl. stirring bar

Magnetic stirrer is not supplied.

fish-clip						
Colour	Fits to stirring bar dia. mm	Price €	Quantity scale from	Scale price €	Item no.	
blue	6		10		8280-0006 N4	
red	8		10		8280-0008 N4	

Accessories		
Description	Price €	Item no.
Compression-type in silicone for fish-clip, for NS 29/32		8280-0253 N4
Compression-type in silicone for fish-clip, for NS 19/26		8280-0257 N4
Compression-type fitting for fish-clip, GL 25, red		8280-0254 N4
Compression-type fitting for fish-clip, GL 32, grey		8280-0255 N4
Compression-type fitting for fish-clip, GL 25 with NS-cone 19/26		8280-0256 N4
Compression-type fitting for fish-clip, GL 32 with NS-cone 29/32		8280-0321 N4
Magnetic stirring bars, length 15 mm, dia. 6 mm		8271-1506 N3
Magnetic stirring bars, length 20 mm, dia. 6 mm		8271-2006 N3
Magnetic stirring bars, length 25 mm, dia. 6 mm		8271-2506 N3
Magnetic stirring bars, length 30 mm, dia. 6 mm		8271-3006 N3
Magnetic stirring bars, length 40 mm, dia. 8 mm		8271-4008 N3
Magnetic stirring bars, length 50 mm, dia. 8 mm		8271-5008 N3



Magnetic stirring bars



Cylindrical stirring bars with smooth surface, many uses.

- ▶ PTFE opaque
- ▶ Max. use temperature +270°C
- ▶ High performance permanent magnets and long lifespan

Cylindrical stirring bars with smooth surface, many uses.

Magnetic stirring bar set consists of 10 of the most standard bars, complete with crystal clear box.

- ▶ 1 of each 15 x 6 mm, 30 x 7 mm
- ▶ 2 of each 20 x 7 mm, 25 x 7 mm, 40 x 7 mm, 50 x 7 mm

Magnetic stirring bars

Length mm	Dia. mm	For fish-clip	Price €	Quantity scale from	Scale price €	Item no.
15	6	yes		10		8271-1506 N3
20	6	yes		10		8271-2006 N3
20	7	no		10		8271-2007 N3
25	6	yes		10		8271-2506 N3
25	7	no		10		8271-2507 N3
30	6	yes		10		8271-3006 N3
30	7	no		10		8271-3007 N3
40	7	no		10		8271-4007 N3
40	8	yes		10		8271-4008 N3
50	7	no		10		8271-5007 N3
50	8	yes		10		8271-5008 N3
80	10	no		10		8271-8010 N3

Magnetic stirring bar set

Model	Price €	Quantity scale from	Scale price €	Item no.
set incl. ten bars		5		8271-1000 N3

Baffle clips



When agitating with magnet or overhead agitators, usually a laminar current with little turbulence tendency develops. Baffle clip disturbs the flow direction and therefore provides a substantially better mixing of the liquid. Baffle clip made of PP is provided with two exchangeable blades in different sizes, which fit in beakers from 1 l to 5 l.

- ▶ PP, white
- ▶ Blade 15 x 160 mm for 1 to 2 litre beakers
- ▶ Blade 30 x 230 mm for 2 to 5 litre beakers
- ▶ Set includes one clip and two blades in both sizes

Baffle clips

Model	Price €	Quantity scale from	Scale price €	Item no.
clip with two blades		10		8281-0001 N4

Mortar



Mortar with particularly hard, abrasion resistant surface. Mortar with base and spout.

Pestle with particularly hard, abrasion resistant surface.

- ▶ Melamine, white
- ▶ Steam sterilisable up to +121°C

Mortar						
Dia. mm	Height mm	Capacity ml	Price €	Quantity scale from	Scale price €	Item no.
125	80	400		5		8252-0300 N3
150	95	700		5		8252-0500 N3

Pestle					
Length mm	Weight g	Price €	Quantity scale from	Scale price €	Item no.
130	60		5		8253-0125 N3
150	90		5		8253-0145 N3

Stirring paddle



Stirring paddle made of Polypropylene for gentle stirring in plastic and glass containers.

- ▶ PP
- ▶ Shatterproof
- ▶ Warp resistant
- ▶ Total length 1,17 m or 1,71 m



Stirring paddle					
Length mm	Width mm	Total length cm	Price €	Item no.	
155	130	117		8203-2100	N3
190	167	171		8203-3150	N3

Clean-it



Dirt accumulations in lab glassware? Put an end to inconvenient scrubbing of lab glassware with outdated and unhygienic bottle brushes. Stainless steel balls have excellent chemical resistance to standard commercial cleaning products. The balls can be used hundreds of times. Tip: Clean-it is ideal for use in every household, especially for wine carafes with red wine ridges or in narrow-neck vases and bottles.

Now with the new collecting pouch. Clean-it balls can be collected with a sieve in the pouch, rinsed and dried.

- ▶ Rust-free stainless steel, hygienic
- ▶ Balls 3 mm Ø
- ▶ With practical collecting pouch

Clean-it			
Weight g	No. of balls	Price €	Item no.
50	920		8282-0001 N4
100	1840		8282-0002 N4

Chemical resistance of plastics

Chemicals					Plastics																								
Formula	CAS-No.	Concentration	Hazard note	Inflammable	HDPE	LDPE	PA	PC	PETG	PMP	POM	PP	PS	PSU	PVC HARD	PVC SOFT	SAN	ECTFE/ETFE	FEP	PTFE	PVDF	EPDM	FKM/FKM	NBR	SI	AL	V2A	V4A	
Acetone	C ₃ H ₆ O	000067-64-1	F, Xi	X	1/1	3/3	1/0	4/4	4/4	2/3	1/3	1/3	4/4	4/4	4/4	0/0	4/4	2/3	(1)	1/1	3/4	1/4	4/4	4/4	0/0	1/1	1/1	1/1	1/1
Calcium chloride	CaCl ₂	010043-52-4	aqueous	Xi	1/1	1/1	1/0	1/0	1/0	1/1	(3)	1/1	1/1	1/0	1/3	1/0	1/1	1/1	1/1	1/1	1/1	1/0	1/1	1/1	0/0	3/3	1/2L	1/2L	
Chlorine	Cl ₂	007782-50-5	10 % wet	T	3/4	3/4	4/4	2/3	4/4	2/4	4/4	4/4	4/4	4/4	1/2	0/0	4/4	1/1	1/1	1/1	(2)	2/0	3/0	4/4	0/0	4/4	4/4	4/4	
Chloroform	CHCl ₃	000067-66-3	100 %	Xn	3/4	4/4	3/4	4/4	4/4	4/4	4/4	3/4	4/4	4/4	4/4	4/4	4/4	2/3	1/1	1/1	1/1	4/4	3/4	4/4	0/0	(3)	1/1	1/1	
Developer for fotos	—	—	?		1/3	1/1	4/4	(2)	1/0	0/0	1/3	1/2	0/0	1/0	1/3	1/0	0/0	0/0	(1)	1/1	1/1	3/0	1/0	1/0	0/0	1/1	1/0	1/0	
Ethyl alcohol	C ₂ H ₆ O	000064-17-5	96 %	F	X	1/0	1/3	1/0	1/3	1/1	1/2	1/2	1/1	3/4	1/2	1/3	3/0	1/3	1/1	1/1	1/1	1/0	3/0	3/3	0/0	1/1	1/1	1/1	
Formaldehyde solution	CH ₂ O	000050-00-0	40 %	T	1/2	2/3	1/3	1/2	1/0	1/2	1/2	1/2	1/2	4/4	2/3	2/3	3/3	0/4	1/1	1/1	1/1	1/0	3/0	(3)	0/0	1/1	1/1	1/1	
Formic acid	CH ₂ O ₂	000064-18-6	98-100 %	C	1/1	1/2	4/4	3/4	0/0	1/3	4/4	1/3	3/4	3/3	3/4	1/3	3/4	1/1	(1)	1/1	1/1	3/4	4/4	4/4	0/0	1/0	1/3	1/2	
Fuel oil	—	—		Xn	3/3	3/4	1/0	3/3	1/0	2/3	1/1	1/3	3/4	1/2	1/1	3/3	1/1	1/1	1/1	1/1	1/1	4/4	1/1	1/1	0/0	1/1	1/1	1/1	
Gasoline	C ₈ H ₁₂ -C ₁₂ H ₂₆	086290-81-5		F, Xn, N	X	2/3	3/4	1/0	3/3	(2)	2/3	1/2	3/4	4/4	3/3	2/4	0/0	0/4	1/1	1/1	1/1	4/4	(1-3)	3/0	0/0	1/1	1/1	1/1	
Hydrogen chloride	HCl	007647-01-0	35 %	C	1/1	1/1	4/4	4/4	(4)	1/2	4/4	1/2	3/3	1/1	2/3	3/3	1/3	1/1	1/1	1/1	1/1	3/0	1/2	4/4	0/0	4/4	4/4	4/4	
Hydrogen fluoride	HF	007664-39-3	70 %	T+, C	0/0	1/3	4/4	4/4	4/4	0/0	4/4	1/3	4/4	4/4	1/4	3/0	0/0	0/0	(1)	1/1	1/1	3/4	(3)	4/4	0/0	4/4	4/4	4/4	
Isopropyl alcohol	C ₃ H ₈ O	000067-63-0	techn. pure	F	X	1/1	1/1	1/0	1/2	1/0	1/2	1/0	1/1	2/2	1/2	1/2	4/4	1/4	1/1	1/1	1/1	1/0	1/1	3/3	0/0	(2)	(1)	(1)	
Methyl ethyl ketone (MEK)	C ₄ H ₈ O	000078-93-3		F	X	1/3	3/4	1/0	4/4	4/4	4/4	1/2	1/3	4/4	4/4	4/4	4/4	2/3	1/1	1/1	3/4	3/0	4/4	4/4	0/0	(1)	(1)	(1)	
Nitric acid	HNO ₃	007697-37-2	50 %	C+	2/4	3/4	4/4	4/4	(2)	2/4	4/4	3/4	4/4	2/3	2/3	0/0	0/3	1/1	1/1	1/1	1/1	4/4	1/0	4/4	0/0	4/4	1/2	1/2	
Nitrohydrochloric acid	HNO ₃ + HCl	008007-56-5		C	4/4	4/4	4/4	4/4	3/3	4/4	4/4	4/4	4/4	4/4	4/4	3/4	1/1	(2)	1/1	3/0	4/4	4/4	4/4	0/0	4/4	4/4	4/4		
Phosphoric acid	H ₃ PO ₄	007664-38-2	85 %	C	1/1	1/1	4/4	1/2	0/0	1/2	4/4	1/2	1/2	1/1	1/2	1/1	1/2	1/1	1/1	1/1	1/1	3/0	1/1	4/4	0/0	4/4	2/4	1/3	
Sodium hydroxide	NaHO	001310-73-2	50 %	C+	1/1	1/1	1/0	4/4	4/4	1/1	1/3	1/1	2/2	1/1	1/2	0/0	0/3	1/1	1/1	1/1	3/3	1/0	3/4	3/3	0/0	4/4	1/3	1/3	
Spirits of Turpentine	—	008006-64-2		Xn	X	2/2	3/4	1/0	4/4	1/0	3/3	1/1	4/4	4/4	2/3	4/4	3/3	1/1	1/1	1/0	1/3	4/4	1/1	3/3	0/0	1/1	1/1	1/1	
Sulfuric acid	H ₂ SO ₄	007664-93-9	95 %	C+	3/4	3/4	4/4	4/4	2/2	4/4	3/4	4/4	4/4	2/4	0/0	4/4	1/1	1/1	1/1	1/1	4/4	1/1	4/4	1/1	4/4	0/0	4/4	1/3	1/3
Tetrachloroethylene	C ₂ Cl ₄	000127-18-4		Xn	4/4	4/4	4/4	3/4	4/4	1/3	4/4	4/4	4/4	4/4	4/4	4/4	3/3	1/1	1/1	1/1	1/1	4/4	2/3	4/4	0/0	(3)	0/0	0/0	
Trichloroethylene (TRI)	C ₂ HCl ₃	000079-01-6	100 %	Xn	3/4	4/4	3/0	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4	0/4	1/2	1/1	1/0	1/1	4/4	1/3	4/4	0/0	1/3	1/1L	1/1L		
Vinegar	C ₂ H ₄ O ₂	000064-19-7		(Xi)	1/1	1/3	4/4	1/2	1/1	1/0	1/3	1/1	1/0	1/0	1/0	3/0	1/1	1/1	1/1	1/1	1/1	1/0	3/3	3/3	0/0	1/3	1/2	1/2	
Xylene	C ₈ H ₁₀	001330-20-7		(F), Xn	X	3/4	3/4	1/0	4/4	0/0	3/4	1/2	4/4	4/4	4/4	4/4	4/4	1/2	1/1	1/0	1/3	4/4	1/3	4/4	0/0	1/1	1/1	1/1	

Two values are given per substance, left number = value at + 20 °C, right number = value at + 50 °C.

1 = resistant, 2 = practically resistant, 3 = partially resistant, 4 = not resistant, 0 = no data available.

K = no general information available; L = danger of pitting or stress-cracking corrosion, values in parentheses are estimated values.

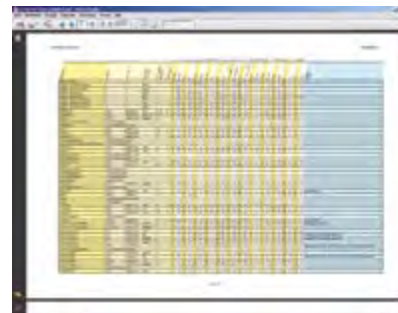
Hazard notes: C = caustic; F = inflammable; F+ = highly inflammable; O = fire-promoting; T = poisonous; T+ = very poisonous; Xn = slightly poisonous; Xi = irritant

Important note

The tables headed "Chemical resistance of plastics" and "Properties of plastics materials" have been compiled from information from various producers of raw materials. The figures relate exclusively to laboratory tests on raw materials.

Plastics items made from these materials are often subject to influences which cannot be detected in a laboratory test (temperature, pressure, stresses in the material, chemical substances, design features, etc.). For these reasons the figures quoted can serve only as a guideline. In case of doubt we strongly recommend that a test be carried out. No legal claims can be derived from these figures and we disclaim all liability. The chemical and mechanical resistance of a product does not suffice for the assessment of its suitability for use, for example legislation on flammable liquids (explosion protection) is to be taken into particular consideration.

Detailed table can be downloaded free of charge



- ▶ More than 1600 media
- ▶ With viscosity table
- ▶ CAS numbers
- ▶ Simple operation
- ▶ Free of charge
- ▶ Download address:
www.buerkle.de/chemical-resistance.html

Plastics technology | overview of chemical resistance

E-CTFE	Ethylene-chlorotrifluorethylene (Halar)	PA	Polyamide	PSU	Polysulfone
FEP	Fluorinated ethylene-propylene (Teflon, FEP)	PC	Polycarbonate	PTFE	Polytetrafluoroethylene
PETG	Polyethyleneterephthalate	PFA	Perfluoro-alkoxy (Teflon, PFA)	PVC	Polyvinylchlorid
FPM/FKM	Fluoroelastomer (Viton)	PMP	Polymethylpentene (TPX)	PVDF	Polyvinylidenefluoride
HDPE	High-density polyethylene	PP	Polypropylene	SAN	Styrene-acrylnitrile
LDPE	Low-density polyethylene	PS	Polystyrene	SI	Silicone rubber

Plastics abbreviations	Temperature		steam ⁴⁾ 121°C	Sterilization ⁵⁾			chemical formalin, ethanol	Transparency	Flexibility	Specific weight g/cm ³	Water absorption %
	max. ₁₎ °C	min ₂₎ °C		gas ethyleneoxide	radiation 2.5 kGy						
E-CTFE	+ 150°	- 100°	yes	yes	no	yes	transparent	moderate	1.70	< 0.10	
FEP	+ 205°	- 255°	yes	yes	no	yes	transparent	very good	2.15	< 0.01	
FPM	+ 200°	- 20°					black	good	1.90		
HDPE	+ 110°	- 50°	no	yes	yes	yes	transparent	stiff	0.95	0.01	
LDPE	+ 95°	- 50°	no	yes	yes	yes	transparent	excellent	0.92	0.01	
PA	+ 90°	- 0°	no	yes	yes	yes	transparent	stiff	1.13	1.30	
PC	+ 135°	- 135°	yes	yes	yes	yes	clear	rigid	1.20	0.35	
PFA	+ 250°	- 270°	yes	yes	no	yes	transparent	excellent	2.15	0.03	
PMP	+ 175°	- 150°	yes	yes	yes	yes	glass-clear	stiff	0.83	0.01	
PP	+ 135°	0°	yes	yes	no	yes	transparent	stiff	0.90	0.02	
PS	+ 70°	- 20°	no	no	yes	yes	glass-clear	stiff	1.05	0.05	
PSU	+ 165°	- 100°	yes	yes		yes	clear	stiff	1.24	0.30	
PTFE	+ 270°	- 270°	yes	yes	no	yes	white	excellent	2.25	< 0.01	
PVC	+ 70°	- 30°	no ³⁾	yes	no	yes	clear	stiff	1.35	0.06	
PVDF	+ 160°	- 4°	yes	yes	yes	yes	transparent	stiff	1.78	0.04	
SAN	+ 95°	- 40°	no	yes	no	yes	glass-clear	stiff	1.03	0.05	
SI	+ 180°	- 60°	yes	yes	no	yes	transparent	excellent	1.10		
PETG	+ 70°	+ 5°	no	?	?	yes	glass-clear	stiff	1.78	0.70	

¹⁾ Even higher for short periods

²⁾ Brittle temperature

³⁾ Except PVC hoses, which can be sterilized with steam at a temperature of 121 °C

⁴⁾ Frequent steam sterilization reduces mechanical stability!

⁵⁾ Clean apparatus with distilled water first (to avoid stress cracking corrosion). In the case of closed vessels, remove or slightly open lid, do not close lid tight again until the vessel has cooled down.

Substance class at 20 °C	ABS	ECTFE	HDPE	LDPE	PA	PC	PMP	PP	PS	PTFE/FEP/PFA	PVC	SAN	SI
Aldehydes	-	+	+	+	0	0	0	+	-	+	-	-	0
Alcohols aliphatic	+	+	+	+	0	+	+	+	+	+	+	+	+
Esters	-	+	0	0	+	-	0	0	-	+	-	-	0
Ethers	-	+	0	-	+	-	-	-	-	+	-	-	-
Ketones	-	0	0	0	+	-	0	0	-	+	-	-	-
Carbohydrates													
aliphatic	-	+	+	0	+	0	0	+	-	+	+	-	-
aromatic	-	+	+	0	+	-	-	0	-	+	-	-	-
halogenated	-	+	0	-	0	-	-	0	-	+	-	-	-
Acids, weak/dilute	0	+	+	+	0	0	+	+	0	+	+	0	0
Acids, strong/concentrated	-	+	+	+	-	-	+	+	0	+	+	-	-
Acids, oxidising	-	0	0	0	-	-	0	0	-	+	-	-	-
Bases	0	+	+	+	0	-	+	+	-	+	+	+	+

+ = excellent chemical resistance

The substance does not result in any damage to the plastic after 30 days of permanent contact. The plastic may remain resistant for years.

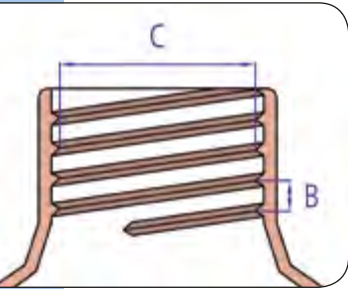
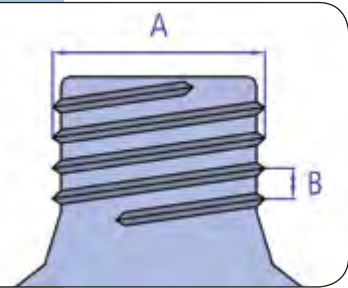
0 = good/limited chemical resistance

Within 7 to 30 days of permanent contact, the substance provokes minor damage which may be reversible (softening, swelling, reduction of mechanical strength, discolourations).

- = low chemical resistance

Not suitable for permanent contact with this substance. Damage to the plastic may occur immediately (reduction of mechanical strength, deformation, discolourations, splits, dissolution, risk of breakage).

Suitable thread adapters | for many container threads



Plastic barrels and containers can have a wide range of thread types. Some are standardized according to DIN, BSI or US standards. Other threads are manufacturer-specific. We can supply suitable adapters for most containers so that discharge valves, pumps and other accessories can be safely attached.

Various steps are necessary in order to select the correct adapter. Proceed as follows:

1. First use the thread table to select the container thread.

If possible use calipers for the measurement, although most threads can be measured accurately enough with a ruler.

If your container has an outer thread you will require an adapter with an inner thread. Containers with an inner thread require adapters with an outer thread.

2. In the Adapter overview on page 28 you will find the suitable adapter.

All thread descriptions refer directly to the adapter. This means that if your container has a $\frac{3}{4}$ " outer thread you will require an adapter with a $\frac{3}{4}$ " inner thread. If you cannot find the necessary adapter here, or if you cannot determine the thread size, just send us a screw cap and we will send you a suitable adapter.

Example

Your container thread is an outer thread with a diameter of 71 mm. You want to use a PP barrel pump with a barrel screw joint. Use the thread table to determine the type of thread. As it is a 71 mm thread you will require an adapter with a 71 mm inner thread. The barrel screw joint thread is 2" BSP outer. This means that you need an adapter from 71 mm inner to 2" BSP inner. In the Adapter table on page 28 you will then find the corresponding article number 0600-1003.

Threads overview

A mm	B mm	C mm	Thread description	Thread type
53	5	50,5	51 mm, DIN 51*)	sawtooth
59-60	6	55,8	61 mm, DIN 60	sawtooth
61	6	55,8	61 mm, DIN 61	sawtooth
71	6	66,5	71 mm, DIN 71	sawtooth
59	2,2	57,5	2" BSP/R2" steel drum fine thread	sawtooth
64,5	5	60	63 mm, 64 mm BSI	sawtooth
33,5	3	32,7	35 mm	round/std.
69,5	5,5	65	2" coarse thread Mauser L-ring	sawtooth
56	3,5	52,5	Tri-Sure/2" coarse thread v. Leer/Tri-sure	sawtooth
63,2	4,25	57,5	US drum thread	sawtooth

*) old and alternative thread names are printed **semibold**

Packaging containers with UN approval

What is a container with UN approval?

The person who fills a package with hazardous materials is responsible for its safety on dispatch. In a UN approved container you can transport hazardous goods safely without having to repack them and thus save costs.

What is "UN-approved"?

The UN has drawn up a list of more than 6000 hazardous substances classified according to the risk that they represent; this determines their packaging group. Packaging group I (X) corresponds to a high degree of risk represented by the contents, e.g. very corrosive substances; packaging group II (Y) a medium degree of risk and packaging group III (Z) less hazardous substances.

The UN approval describes the type of packaging to be used for the transport of hazardous substances. The certificate is issued by recognized material testing institutes. In mass production the manufacturer must guarantee that the product meets the specifications for the type of packaging and that the packaging is manufactured and tested according to a quality assurance program recognized and monitored by the registration office.

Test criteria (limits must not be infringed)

- ▶ chemical compatibility
- ▶ temperature
- ▶ flash point < 61 °C
- ▶ drop height
- ▶ pressure (i.e. vapor pressure of the contents plus partial pressure of any gases that may be present)
- ▶ packaging groups I, II, III (density kg/l)
- ▶ shelf life from filling date (if applicable)

Approval numbers

- ▶ The identification contains the symbol for UN-tested packaging, the code for the container material, packaging group, test pressure in kPa, year of manufacture, country of approval, registration office, approval number and manufacturer.
- ▶ If the approval number contains a letter (e.g. F or S) in the position that would otherwise be occupied by the test pressure in kPa then the packaging is only approved for use with solids, not with liquids.
- ▶ New approval numbers apply for all types of transport, i.e. there is no longer any limitation to road, rail, sea or air transport.



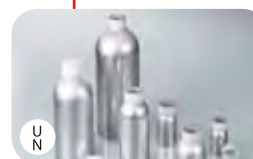
Wide-neck reagent bottle
rectangular/space-saving, sturdy, with UN approval for solids

see page 159



Transport bottle
UN-certified bottle for chemicals

see page 169



Aluminum bottle

see page 170



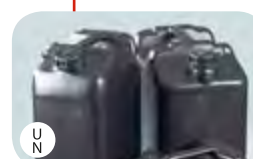
Aluminium bottle
with UN-approval for the transport of dangerous goods

see page 171



Jerrycans
stackable, made of transparent HDPE, space-saving

see page 180



Jerrycans
electrically conductive

see page 181



Wide-mouth containers
extra-wide opening for secure filling

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