ROWE SCIENTIFIC

Chemwatch: 25-1754 Version No: 12.1

Safety Data Sheet according to Work Health and Safety Regulations (Hazardous Chemicals) 2023 and ADG requirements

Chemwatch Hazard Alert Code: 3 Issue Date: 16/01/2025 Print Date: 17/01/2025

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SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier	
Product name	Rowe Scientific Fixative Concentrate pH7
Chemical Name	Not Applicable
Synonyms	CF1946; CF1947
Proper shipping name	AVIATION REGULATED LIQUID, N.O.S. (contains formaldehyde)
Chemical formula	Not Applicable
Other means of identification	Not Available

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Fixative concentrate.
Relevant identified uses	The state of the state of the second

Use according to manufacturer's directions.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	ROWE SCIENTIFIC
Address	11 Challenge Boulevard Wangara WA 6065 Australia
Telephone	+61 8 9302 1911
Fax	+61 8 9302 1905
Website	https://rowe.com.au/
Email	rowewa@rowe.com.au

Emergency telephone number

Association / Organisation	ROWE SCIENTIFIC
Emergency telephone number(s)	+61 8 9302 1911 (24 Hrs)
Other emergency telephone number(s)	Not Available

SECTION 2 Hazards identification

Classification of the substance or mixture

Poisons Schedule	S6
Classification ^[1]	Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Category 1B, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity (Inhalation) Category 4, Germ Cell Mutagenicity Category 2, Reproductive Toxicity Category 1B
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements



H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H360D	May damage the unborn child.

P201	Obtain special instructions before use.
P260	Do not breathe mist/vapours/spray.
P264	Wash all exposed external body areas thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary statement(s) Response

P301+P330+P331	IS SWALLOWED, Disco mouth, Do NOT induce comiting, If more than 15 mine from Dester, INDUCE VOMITING (if conscious)	
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If more than 15 mins from Doctor, INDUCE VOMITING (if conscious).	
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P308+P313	IF exposed or concerned: Get medical advice/ attention.	
P310	Immediately call a POISON CENTER/doctor/physician/first aider.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P363	Wash contaminated clothing before reuse.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
50-00-0	10-24	formaldehyde
Not Available		(as 37% solution)
7632-05-5	<10	sodium phosphate
7732-18-5	>60	water
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L: * EU IOELVs available	

SECTION 4 First aid measures

Description of first aid measures

•		
Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. 	
Skin Contact	 If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor. 	
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. 	
Ingestion	 For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay. 	

Continued...

Rowe Scientific Fixative Concentrate pH7

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider:

foam.

- dry chemical powder.
- carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.	
A duine fou finafialatour		
Advice for firefighters		
	Alert Fire Brigade and tell them location and nature of hazard.	

Fire Fighting	 Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. 	
Fire/Explosion Hazard	 The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Decomposes on heating and may produce toxic fumes of carbon monoxide (CO). May emit acrid smoke. 	
	Decomposes on heating and produces toxic fumes of: carbon dioxide (CO2) phosphorus oxides (POx) metal oxides other pyrolysis products typical of burning organic material.	
HAZCHEM	2Z	

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain or absorb spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Collect recide and prevent runoff into drains. After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using. If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

Precautions for safe handling	
Safe handling	DO NOT allow clothing wet with material to stay in contact with skin
	Avoid all personal contact, including inhalation.
	Wear protective clothing when risk of exposure occurs.
	Use in a well-ventilated area.
	Avoid contact with moisture.
	Avoid contact with incompatible materials.
	When handling, DO NOT eat, drink or smoke.

	 Keep containers securely sealed when not in use. Avoid physical damage to containers.
	Always wash hands with soap and water after handling.
	Work clothes should be laundered separately. Launder contaminated clothing before re-use.
	Use good occupational work practice.
	Observe manufacturer's storage and handling recommendations contained within this SDS.
	Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
	 Store in original containers.
	Keep containers securely sealed.
Other information	Store in a cool, dry, well-ventilated area.
	Store away from incompatible materials and foodstuff containers.
	Protect containers against physical damage and check regularly for leaks.
	Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

• • •	
Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. Incidents involving interaction of active oxidants and reducing agents, either by design or accident, are usually very energetic and examples of so-called redox reactions. Avoid strong bases.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	formaldehyde	Formaldehyde	1 ppm / 1.2 mg/m3	2.5 mg/m3 / 2 ppm	Not Available	Not Available
Ingredient	Original IDLH			Revised IDLH		
formaldehyde	20 ppm	20 ppm		Not Available		
sodium phosphate	Not Available	Not Available		Not Available		
water	Not Available	Not Available		Not Available		

MATERIAL DATA

Exposure controls

Exposure controls	
Appropriate engineering controls	 Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed property. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area. Work should be undertaken in an isolated system such as a "glove-box". Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system. Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within. Open-vessel systems are prohibited. Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontaminatino
Individual protection measures, such as personal protective equipment	
Eye and face protection	 Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below
Hands/feet protection	Wear chemical protective gloves, e.g. PVC.

	Wear safety footwear or safety gumboots, e.g. Rubber
	When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots. NOTE:
	 The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
	Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.
	The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
	The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed
	when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be
	washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.
	Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: · frequency and duration of contact,
	chemical resistance of glove material, glove thickness and
	· dexterity
	Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).
	 When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to
	EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
	 Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
	Contaminated gloves should be replaced. As defined in ASTM F 730.06 in any application, gloves are rated as:
	As defined in ASTM F-739-96 in any application, gloves are rated as: • Excellent when breakthrough time > 480 min
	· Good when breakthrough time > 20 min
	Fair when breakthrough time < 20 min Poor when glove material degrades
	For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.
	It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
	Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.
	Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:
	Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
	Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion
	or puncture potential Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed
	moisturiser is recommended.
Body protection	See Other protection below
	Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent]
	• Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-
	type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted. [AS/NZS 1715 or national equivalent]
	Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the
	 same level with locations where direct exposure is likely. Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective
Other protection	clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers
	at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and
	required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood.
	Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.
	• Overalls.
	P.V.C apron.
	 Barrier cream. Skin cleansing cream.
	► Eye wash unit.

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

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Material	CPI
BUTYL	A
NEOPRENE	A
VITON	A
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
PE	С
PE/EVAL/PE	С
PVA	С
PVC	С

Respiratory protection

Type BAX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	BAX-AUS	-	BAX-PAPR-AUS / Class 1
up to 50 x ES	-	BAX-AUS / Class 1	-
up to 100 x ES	-	BAX-2	BAX-PAPR-2 ^

^ - Full-face

 $\begin{array}{l} \mathsf{A}(\mathsf{All \ classes}) = \mathsf{Organic \ vapours}, \mathsf{B} \ \mathsf{AUS \ or \ B1} = \mathsf{Acid \ gasses}, \mathsf{B2} = \mathsf{Acid \ gas \ or} \\ \mathsf{hydrogen \ cyanide}(\mathsf{HCN}), \mathsf{B3} = \mathsf{Acid \ gas \ or \ hydrogen \ cyanide}(\mathsf{HCN}), \mathsf{E} = \mathsf{Sulfur} \\ \mathsf{dioxide}(\mathsf{SO2}), \mathsf{G} = \mathsf{Agricultural \ chemicals}, \mathsf{K} = \mathsf{Ammonia}(\mathsf{NH3}), \mathsf{Hg} = \mathsf{Mercury}, \mathsf{NO} = \\ \mathsf{Oxides \ of \ nitrogen}, \mathsf{MB} = \mathsf{Methyl \ bromide}, \mathsf{AX} = \mathsf{Low \ boiling \ point \ organic} \\ \mathsf{compounds}(\mathsf{below \ 65 \ degC}) \\ \end{array}$

Cartridge respirators should never be used for emergency ingress or in areas of

detecting any odours through the respirator. The odour may indicate that the mask

is not functioning properly, that the vapour concentration is too high, or that the

mask is not properly fitted. Because of these limitations, only restricted use of

Cartridge performance is affected by humidity. Cartridges should be changed after

2 hr of continuous use unless it is determined that the humidity is less than 75%,

The wearer must be warned to leave the contaminated area immediately on

in which case, cartridges can be used for 4 hr. Used cartridges should be

unknown vapour concentrations or oxygen content.

cartridge respirators is considered appropriate.

discarded daily, regardless of the length of time used

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TEFLON C

* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance Clear, water-white liquid with a suffocating pungent highly irritating odour; mixes with water, alcohol, acetone.

Liquid	Relative density (Water = 1)	~1.1
Pungent	Partition coefficient n-octanol / water	Not Available
Not Available	Auto-ignition temperature (°C)	430
7	Decomposition temperature (°C)	Not Applicable
-92 gas	Viscosity (cSt)	Not Available
100	Molecular weight (g/mol)	Not Applicable
Not Available	Taste	Not Available
Not Available	Explosive properties	Not Available
Not Available	Oxidising properties	Not Available
Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Not Available	Volatile Component (%vol)	>90
> 100	Gas group	Not Available
Miscible	pH as a solution (1%)	Not Available
1.1	VOC g/L	Not Available
Not Available	Ignition Distance (cm)	Not Available
Not Available	Flame Duration (s)	Not Available
Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available
	Pungent Not Available 7 -92 gas 100 Not Available Not Available Not Available Not Available Not Available 100 Miscible 1.1 Not Available Not Available Not Available	Pungent Partition coefficient n-octanol Not Available Auto-ignition temperature (°C) 7 Decomposition temperature (°C) -92 gas Viscosity (CSt) 100 Molecular weight (g/mol) Not Available Taste Not Available Explosive properties Not Available Oxidising properties Not Available Oxidising properties Not Available Surface Tension (dyn/cm or mN/m) Not Available Gas group Not Available Ignition Distance (cm) Not Available Ignition Distance (cm) Not Available Ignition Distance (cm)

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	 Presence of heat source and ignition source Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful. Strong evidence exists that exposure to the material may produce very serious irreversible damage (other than carcinogenesis, mand teratogenesis) following a single exposure by inhalation.

Inhaled	Strong evidence exists that exposure to the material may produce very serious irreversible damage (other than carcinogenesis, mutagenesis and teratogenesis) following a single exposure by inhalation. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo.
Ingestion	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion. Strong evidence exists that exposure to the material may produce very serious irreversible damage (other than carcinogenesis, mutagenesis and teratogenesis) following a single exposure by swallowing.
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption. The material can produce chemical burns following direct contact with the skin. Strong evidence exists that exposure to the material may produce very serious irreversible damage (other than carcinogenesis, mutagenesis and teratogenesis) following a single exposure by skin contact.

	Open cuts, abraded or irritated skin should not be exposed Entry into the blood-stream through, for example, cuts, abra effects. Examine the skin prior to the use of the material an	asions, puncture wounds or lesions, may produce systemic injury with harmful	
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation. Irritation of the eyes may produce a heavy secretion of tears (lachrymation).		
Chronic	necrosis (rarely) of the jaw. Bronchial irritation, with cough, disturbances may also occur. Chronic exposures may resul Strong evidence exists that the substance may cause irreve Practical evidence shows that inhalation of the material is of at a greater frequency than would be expected from the rese Pulmonary sensitisation, resulting in hyperactive airway dys aching. Significant symptoms of exposure may persist for evariety of nonspecific environmental stimuli such as automor Practical experience shows that skin contact with the material individuals, and/or of producing a positive response in expec- Substances that can cause occupational asthma (also kno- airway hyper-responsiveness via an immunological, irritant exposure to the substance, sometimes even to tiny quantiti a runny nose to asthma. Not all workers who are exposed to advance who are likely to become hyper-responsive. Substances than can cuase occupational asthma should be people with pre-existing air-way hyper-responsiveness. The Wherever it is reasonably practicable, exposure to substann possible the primary aim is to apply adequate standards of Activities giving rise to short-term peak concentrations shot surveillance is appropriate for all employees exposed or lia there should be appropriate consultation with an occupation On the basis of epidemiological data, the material is regard association between human exposure to the material and the Serious damage (clear functional disturbance or morpholog repeated or prolonged exposure. As a rule the material pro- may become apparent following direct application in subch toxicity tests. There is sufficient evidence to provide a strong presumption generally on the basis of: - clear results in appropriate animal studies where effects h same dose leveles as other toxic effects but which are not sis Limited evidence suggests that repeated or long-term occu	ersible but non-lethal mutagenic effects following a single exposure. apable of inducing a sensitisation reaction in a substantial number of individuals sponse of a normal population. sfunction and pulmonary allergy may be accompanied by fatigue, malaise and axtended periods, even after exposure ceases. Symptoms can be activated by a obile exhaust, perfumes and passive smoking. rial is capable either of inducing a sensitisation reaction in a substantial number of erimental animals. wn as asthmagens and respiratory sensitisers) can induce a state of specific or other mechanism. Once the airways have become hyper-responsive, further es, may cause respiratory symptoms. These symptoms can range in severity from to a sensitiser will become hyper-responsive and it is impossible to identify in e distinguished from substances which may trigger the symptoms of asthma in a latter substances are not classified as asthmagens or respiratory sensitisers ces that can cuase occupational asthma should be prevented. Where this is not control to prevent workers from becoming hyper-responsive. Ild receive particular attention when risk management is being considered. Health ble to be exposed to a substance which may cause occupational asthma and nal health professional over the degree of risk and level of surveillance. led as carcinogenic to humans. There is sufficient data to establish a causal	
	biochemical systems.		
Rowe Scientific Fixative Concentrate pH7	TOXICITY Not Available	IRRITATION Not Available	
	τοχιςιτγ	IRRITATION	
	Dermal (rabbit) LD50: 270 mg/kg ^[2]	Eye (Human): 1ppm/6M - Mild	
	Inhalation (Rat) LC50: <463 ppm4h ^[1]	Eye (Human): 4ppm/5M	
	Oral (Rat) LD50: 100 mg/kg ^[2]	Ever (Dealerst answer): 00(Mealerste	
		Eye (Rodent - mouse): 3% - Moderate	
		Eye (Rodent - rabbit): 10mg - Severe	
		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe	
		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe	
		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe Skin (Rodent - rabbit): 2mg/24H - Severe	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe Skin (Rodent - rabbit): 2mg/24H - Severe Skin (Rodent - rabbit): 50mg/24H - Moderate	
formaldehyde		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe Skin (Rodent - rabbit): 50mg/24H - Moderate	
		Eye (Rodent - rabbit): 10mg - SevereEye (Rodent - rabbit): 37% - SevereEye (Rodent - rabbit): 750ug - SevereEye (Rodent - rabbit): 750ug/24H - SevereSkin (Human - man): 1%/2DSkin (Human): 0.01% - SevereSkin (Human): 150ug/3D (intermittent) - MildSkin (Human): 150ug/3D (intermittent) - MildSkin (Human): 2%/48HSkin (Rodent - mouse): 7% - ModerateSkin (Rodent - rabbit): 0.8% - SevereSkin (Rodent - rabbit): 2mg/24H - SevereSkin (Rodent - rabbit): 50mg/24H - ModerateSkin (Rodent - rabbit): 540mg - MildSkin (Rodent - rabbit): 540mg - MildSkin (Rodent - rat): 7% - Moderate	
formaldehyde sodium phosphate		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 150ug/3D (intermittent) - Mild Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe Skin (Rodent - rabbit): 2mg/24H - Severe Skin (Rodent - rabbit): 50mg/24H - Moderate Skin (Rodent - rabbit): 540mg - Mild Skin: adverse effect observed (corrosive) ^[1]	
		Eye (Rodent - rabbit): 10mg - Severe Eye (Rodent - rabbit): 37% - Severe Eye (Rodent - rabbit): 750ug - Severe Eye (Rodent - rabbit): 750ug/24H - Severe Skin (Human - man): 1%/2D Skin (Human): 0.01% - Severe Skin (Human): 150ug/3D (intermittent) - Mild Skin (Human): 2%/48H Skin (Rodent - mouse): 7% - Moderate Skin (Rodent - rabbit): 0.8% - Severe Skin (Rodent - rabbit): 50mg/24H - Severe Skin (Rodent - rabbit): 50mg/24H - Moderate Skin (Rodent - rabbit): 50mg/24H - Moderate Skin (Rodent - rabbit): 540mg - Mild Skin (Rodent - rabit): 7% - Moderate Skin (Rodent - rabbit): 540mg - Mild Skin: adverse effect observed (corrosive) ^[1] IRRITATION	

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Not Available

water

Oral (Rat) LD50: >90000 mg/kg^[2]

	contact eczema involves a cell-mediated (T lymphod urticaria, involve antibody-mediated immune reaction potential: the distribution of the substance and the oj which is widely distributed can be a more important a contact. From a clinical point of view, substances are tested. The material may produce severe irritation to the eve produce conjunctivitis. The material may produce severe skin irritation after This form of dermatitis is often characterised by skin Histologically there may be intercellular oedema of th contact is unlikely, given the severity of response, bu Asthma-like symptoms may continue for months or econdition known as reactive airways dysfunction sym compound. Main criteria for diagnosing RADS include of persistent asthma-like symptoms within minutes to include a reversible airflow pattern on lung function t	cytes) immune reaction of the delaye ns. The significance of the contact al pportunities for contact with it are eq allergen than one with stronger sens e noteworthy if they produce an aller e causing pronounced inflammation. r prolonged or repeated exposure, ar n redness (erythema) thickening of th he spongy layer (spongiosis) and int ut repeated exposures may produce even years after exposure to the mat ndrome (RADS) which can occur afte de the absence of previous airways of o hours of a documented exposure to tests, moderate to severe bronchial I ithout eosinophilia. RADS (or asthmin d duration of exposure to the irritatir	Ilergen is not simply determined by its sensitisation ually important. A weakly sensitising substance ittising potential with which few individuals come into gic test reaction in more than 1% of the persons Repeated or prolonged exposure to irritants may nd may produce a contact dermatitis (nonallergic). e epidermis. racellular oedema of the epidermis. Prolonged severe ulceration. terial ends. This may be due to a non-allergic er exposure to high levels of highly irritating disease in a non-atopic individual, with sudden onset o the irritant. Other criteria for diagnosis of RADS hyperreactivity on methacholine challenge testing,
	is a disorder that occurs as a result of exposure due reversible after exposure ceases. The disorder is che WARNING: This substance has been classified by the Tenth Annual Report on Carcinogens: Substance an [National Toxicology Program: U.S. Dep. of Health &	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen	.
SODIUM PHOSPHATE	reversible after exposure ceases. The disorder is che WARNING: This substance has been classified by the Tenth Annual Report on Carcinogens: Substance an	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & <i>Human Services 2002</i>] ed or repeated exposure and may pro ythema) and swelling epidermis. His	bugh and mucus production. NIC TO HUMANS.
SODIUM PHOSPHATE FORMALDEHYDE & WATER	reversible after exposure ceases. The disorder is che WARNING: This substance has been classified by th Tenth Annual Report on Carcinogens: Substance an [<i>National Toxicology Program: U.S. Dep. of Health &</i> for sodium phosphate, dibasic The material may cause skin irritation after prolonge dermatitis is often characterised by skin redness (erg	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & <i>Human Services 2002</i>] ed or repeated exposure and may pro ythema) and swelling epidermis. His of the epidermis.	bugh and mucus production. NIC TO HUMANS.
FORMALDEHYDE & WATER	reversible after exposure ceases. The disorder is characteristic exposure ceases. The material may cause skin irritation after prolonge dermatitis is often characteristic exposing layer (spongiosis) and intracellular oedema ceases.	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & <i>Human Services 2002</i>] ed or repeated exposure and may pro ythema) and swelling epidermis. His of the epidermis. terature search.	AIC TO HUMANS.
	reversible after exposure ceases. The disorder is characteristic exposure ceases. The disorder is characteristic exponent of the exposure of t	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & <i>Human Services 2002</i>] ed or repeated exposure and may pro ythema) and swelling epidermis. His of the epidermis.	bugh and mucus production. NIC TO HUMANS.
FORMALDEHYDE & WATER Acute Toxicity	reversible after exposure ceases. The disorder is character is character in the substance has been classified by the tenth Annual Report on Carcinogens: Substance an <i>[National Toxicology Program: U.S. Dep. of Health &</i> for sodium phosphate, dibasic The material may cause skin irritation after prolonge dermatitis is often characterised by skin redness (erg spongy layer (spongiosis) and intracellular oedema of No significant acute toxicological data identified in lit	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & Human Services 2002] ed or repeated exposure and may pro ythema) and swelling epidermis. His of the epidermis. terature search. Carcinogenicity	AIC TO HUMANS.
FORMALDEHYDE & WATER Acute Toxicity Skin Irritation/Corrosion Serious Eye	reversible after exposure ceases. The disorder is cha WARNING: This substance has been classified by th Tenth Annual Report on Carcinogens: Substance an <i>[National Toxicology Program: U.S. Dep. of Health &</i> for sodium phosphate, dibasic The material may cause skin irritation after prolonge dermatitis is often characterised by skin redness (en spongy layer (spongiosis) and intracellular oedema of No significant acute toxicological data identified in lit	aracterized by difficulty breathing, co he IARC as Group 1: CARCINOGEN titicipated to be Carcinogen & Human Services 2002] ad or repeated exposure and may pro ythema) and swelling epidermis. His of the epidermis. terature search. Carcinogenicity Reproductivity	AIC TO HUMANS.

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
Rowe Scientific Fixative Concentrate pH7	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
formaldehyde	EC50	96h	Algae or other aquatic plants	0.375- 0.579mg/l	4
	EC50	72h	Algae or other aquatic plants	1.034- 1.984mg/l	4
	EC50	48h	Crustacea	3.26mg/l	4
	NOEC(ECx)	96h	Algae or other aquatic plants	0.005mg/l	4
	LC50	96h	Fish	0.727- 9.193mg/L	4
	Endpoint	Test Duration (hr)	Species	Value	Source
sodium phosphate	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Source
water	Not Available	Not Available	Not Available	Not Available	Not Availabl
Legend:	Ecotox databa		ECHA Registered Substances - Ecotoxicological Infor C Aquatic Hazard Assessment Data 6. NITE (Japan)		

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
formaldehyde	LOW (Half-life = 14 days)	LOW (Half-life = 2.97 days)
water	LOW	LOW

Ingredient	Bioaccumulation
formaldehyde	LOW (LogKOW = 0.35)
sodium phosphate	LOW (LogKOW = -7.64)
water	LOW (LogKOW = -1.38)
Mobility in soil	
Ingredient	Mobility
formaldehyde	HIGH (Log KOC = 1)

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	 Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 Transport information

Labels Required	
Marine Pollutant	NO
HAZCHEM	2Z

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR)

14.1. UN number	3334			
14.2. UN proper shipping name	Aviation regulated liquid, n.o.s. * (co	ontains formaldehyde)		
	ICAO/IATA Class	9		
14.3. Transport hazard class(es)	ICAO / IATA Subsidiary Hazard	Not Applicable		
0100(00)	ERG Code	9A		
14.4. Packing group	111			
14.5. Environmental hazard	Not Applicable			
	Special provisions		A27	
	Cargo Only Packing Instructions		964	
	Cargo Only Maximum Qty / Pack		450L	
14.6. Special precautions for user	Passenger and Cargo Packing Instructions		964	
4361	Passenger and Cargo Maximum Qty / Pack		450L	
	Passenger and Cargo Limited Quantity Packing Instructions		Y964	
	Passenger and Cargo Limited Ma	aximum Qty / Pack	30 kg G	

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7. Maritime transport in bulk according to IMO instruments

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
formaldehyde	Not Available
sodium phosphate	Not Available
water	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type
formaldehyde	Not Available
sodium phosphate	Not Available
water	Not Available

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

formaldehyde is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 10 / Appendix C

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

sodium phosphate is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 3 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4 Australian Inventory of Industrial Chemicals (AIIC)

water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Additional Regulatory Information

Not Applicable

National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non- Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (formaldehyde; sodium phosphate; water)
China - IECSC	No (sodium phosphate)
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'
Taiwan - TCSI	Yes
Mexico - INSQ	No (sodium phosphate)
Vietnam - NCI	Yes
Russia - FBEPH	No (sodium phosphate)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

SECTION 16 Other information

Revision Date	16/01/2025
Initial Date	01/11/2010

SDS Version Summary

Version	Date of Update	Sections Updated
11.1	28/06/2024	Classification change due to full database hazard calculation/update.
12.1	16/01/2025	Toxicological information - Acute Health (eye), Toxicological information - Acute Health (inhaled), Toxicological information - Acute Health (skin), Toxicological information - Acute Health (swallowed), First Aid measures - Advice to Doctor, Physical and chemical properties - Appearance, Toxicological information - Chronic Health, Hazards identification - Classification, Disposal considerations - Disposal, Exposure controls / personal protection - Engineering Control, Ecological Information -

Version	Date of Update	Sections Updated
		Environmental, Firefighting measures - Fire Fighter (extinguishing media), Firefighting measures - Fire Fighter (fire/explosion hazard), Firefighting measures - First Fighter (fire fighting), First fighting measures - First Fighter (fire incompatibility), First Aid measures - First Aid (eve), First Aid measures - First Aid (skin), First Aid measures - First Aid (eve), First Aid measures - First Aid (skin), First Aid measures - First Aid (eve), First Aid measures - First Aid (skin), First Aid measures - First Aid (eve), First Aid measures - First Aid (skin), First Aid measures - First Aid (eve), First Aid measures - First Aid (skin), First Aid measures - First Aid (eve), Handling and storage - Instability Condition, Exposure controls / personal protection - Personal Protection (other), Exposure controls / personal protection - Personal Protection (Respirator), Accidental release measures - Spills (major), Handling and storage - Storage (storage incompatibility), Handling and storage - Storage (storage requirement), Handling and storage - Storage (suitable container), Identification of the substance / mixture and of the company / undertaking - Use

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit.
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL: No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
 DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
 PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory

• FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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