LET'S TALK
DESICCATORS

A 100% Australian owned company supplying scientific laboratories throughout Australia and overseas since 1987.
Desiccators are an economical and reliable way to assure dry, dust-free, and if necessary air-free storage of humidity sensitive products, such as valuable reagents or electronics. Depending upon what you are storing, optimal conditions can be achieved using standard desiccants in a manual or automated format, with gas purge, or by keeping the contents under vacuum.

When choosing a desiccator consider the following questions:

1. What storage environment is optimal or required?
   Use the information below for an overview of the environment and benefits each method of desiccation provides.

<table>
<thead>
<tr>
<th>STANDARD DESICCANT</th>
<th>AUTOMATED STANDARD DESICCANT</th>
<th>GAS PURGE DESICCANT</th>
<th>VACUUM DESICCANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual monitoring and operation. Moisture is absorbed from air in the unit by using a desiccant. Once the desiccant is ‘saturated’ it must be regenerated through heating, or replaced.</td>
<td>Electric fans and heaters continuously regenerate the desiccant to prevent saturation and to automatically maintain a low humidity environment.</td>
<td>A slow steady flow of inert gas (often dry nitrogen) is provided.</td>
<td>Air and moisture are removed from the chamber by use of a vacuum pump.</td>
</tr>
<tr>
<td>Flexibility to use any type of desiccant (silica gel beads, activated charcoal, etc.) based on economics and convenience.</td>
<td>Convenience, requires minimal monitoring.</td>
<td>Achieve relative humidity at a much faster rate.</td>
<td>Best for total dry storage or if air could be damaging to material being stored.</td>
</tr>
<tr>
<td>Portability.</td>
<td>Precise control of humidity. Operates on a set schedule of desiccation followed by a regeneration period.</td>
<td>Dust free and desirable for many applications including clean room environments.</td>
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<td>Economical functionality. Most desiccants can be regenerated periodically.</td>
<td>Process uses silica gel beads that last for thousands of regeneration cycles.</td>
<td>Option to close stopcocks and use with regular desiccants.</td>
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</tr>
</tbody>
</table>

2. What size(s) are the items you need to store and in what quantity?
   Interior volume of the desiccator and shelving should be considered. As a visual reference of the interior space an estimate of how many standard 355mL cans of softdrink would fit into each unit has been used. Estimates are a guideline only based on interior volume and do not take shelving or desiccator shape into consideration.

3. How important are ease and economy of use?
   Each method of desiccation has advantages and trade-offs. Each user must determine the method that best serves their purposes. Using standard desiccants and regenerating them as needed is economical, but requires monitoring. There may also be more variability in your environment. An automated desiccator requires much less monitoring but uses electric power. Gas ported desiccators are quick to achieve relative humidity, but if the unit is accessed frequently, proportionately more gas will be needed to keep the desired low humidity level. Vacuum desiccators remove air and moisture and can be brought back to vacuum rather easily after opening, but require a pump.
Secador® line of desiccator cabinets represent a UV Light Blocking, Dry Environment. The attractive design and sturdy construction of the Secador® line of desiccator cabinets assures easy and reliable storage of moisture and light sensitive products. Choose from an extensive range of sizes, styles and colors to meet your specific needs. Some key features include:

- Standard, Automated (230 VAC) and Gas-ported models available.
- Durastar® co-polyester construction blocks 99% of UV light* and is resistant to staining, crazing and chemical attack.
- Amber color models reduce visible light penetration by over 50% making it the perfect choice for storing light sensitive materials like reagents, analytical standards and investigational compounds.
- Large doors maximize access to interior space and have a patented seal design, tab latches and security loops for a padlock or tamper-evident seals.
- 1.0, 2.0, 3.0 and 4.0 – vertical units have a compact 34.1W x 41.4cmD footprint for space saving stacking up to 3 units high; 4.0 horizontal has a wider footprint and lower height.
- Perforated shelves facilitate circulation of dry air.
- Easy-to-view dial hygrometer is located in the door front.

*Mini cabinets are molded of polystyrene which does not block UV light.
Secador® Desiccator Cabinets

Durable, co-polyester construction blocks 99% of UV light (mini is polystyrene)

Patented door seal provides superior protection from moisture

Built-in, convenient carrying handles

NOTE: All 1.0, 2.0, 3.0 and 4.0 cabinets are interchangeably stackable, except 4.0 horizontal.

Portable & stackable

Easy-to-view dial hygrometer in door

Door can be secured with tamper-evident tags or padlock

Automated models provide continuous desiccant regeneration*

Automated models available in 230VAC

All sizes are available with optional gas ports to allow gas purging of the cabinet.

*All non-eletric models can be used with any desiccant including Disposable Desiccant Cartridges CD1958, CD1959 or Desi Can™ Reusable Desiccant Canister CD2526, CD2524 or CD2566.
Secador®
1.0, 2.0, 3.0 and 4.0 Vertical Desiccator Cabinets
Interchangeably Stackable up to 3 Units High
U.S. Patents: 6,834,920; 7,318,630 and D474,626

- All units have a compact 34.1W x 41.4cmD (13.4 x 16.3”) footprint
- Doors open to the left
- Different colors are available to suit your needs

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Internal Volume</th>
<th>Capacity (355mL cans)</th>
<th># of Shelves</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0.74 cu. ft.</td>
<td>20</td>
<td>1 (fixed)</td>
<td>21.3cm (8.4”)</td>
</tr>
<tr>
<td>2.0</td>
<td>1.16 cu. ft.</td>
<td>40</td>
<td>2</td>
<td>31.4cm (12.4”)</td>
</tr>
<tr>
<td>3.0</td>
<td>1.55 cu. ft.</td>
<td>60</td>
<td>3</td>
<td>41.7cm (16.4”)</td>
</tr>
<tr>
<td>4.0</td>
<td>1.87 cu. ft.</td>
<td>70</td>
<td>3</td>
<td>51.8cm (20.4”)</td>
</tr>
</tbody>
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Secador® 1.0, 2.0, 3.0 and 4.0 Desiccator Cabinets

<table>
<thead>
<tr>
<th>ROWE CODE</th>
<th>CATALOG NO.</th>
<th>MODEL</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>PD1505</td>
<td>F42071-0000</td>
<td>1.0</td>
<td>Clear</td>
</tr>
<tr>
<td>CS4243</td>
<td>F42071-0006</td>
<td>1.0</td>
<td>Clear w/Blue End-caps</td>
</tr>
<tr>
<td>CS4242</td>
<td>F42071-0008</td>
<td>1.0</td>
<td>Amber (50+% visible light blocking.)</td>
</tr>
<tr>
<td>PD1514</td>
<td>F42072-1000</td>
<td>2.0</td>
<td>Clear</td>
</tr>
<tr>
<td>PD1513</td>
<td>F42073-1000</td>
<td>3.0</td>
<td>Clear</td>
</tr>
<tr>
<td>CS4244</td>
<td>F42073-1008</td>
<td>3.0</td>
<td>Amber (50+% visible light blocking.)</td>
</tr>
<tr>
<td>PD1511</td>
<td>F42074-1000</td>
<td>4.0</td>
<td>Clear</td>
</tr>
<tr>
<td>PD1509</td>
<td>F42074-1006</td>
<td>4.0</td>
<td>Clear, with Blue End-caps</td>
</tr>
<tr>
<td>CC2304</td>
<td>F42074-1008</td>
<td>4.0</td>
<td>Amber (50+% visible light blocking.)</td>
</tr>
</tbody>
</table>
- Durastar® co-polyester construction blocks 99% of UV light* and is resistant to staining, crazing and chemical attack; amber color units also block over 50% visible light
- Use with any desiccant including cans and disposable cartridges.
- Desiccants can be placed under the bottom shelf to preserve storage space
- Different colors are available to suit your needs

**Secador® Mini Desiccator Cabinet**
The Perfect Choice When Benchtop Space Is at a Premium
- Internal Volume: 0.31 cu. ft.; Holds: 12 cans
- Clear polystyrene for easy viewing of contents
- Option to mount to the underside of a shelf; kit information below
- Door opens to the left
- Overall Dimensions: 33.8W x 25.4D x 21.6cmH (13.3 x 10 x 8.5”)

Rowe code: PD1501

**Under Shelf Mounting Kit Available** (F42075-0201).
For Secador® Mini Desiccator Cabinet
Fittings and instructions for mounting the Secador® Mini Desiccator Cabinet – F42075-1000 underneath a shelf with a minimum thickness of 12mm (1/2”).

**DRYING OVENS**

**IO0128** OVEN FORCED AIR CONVECTION 'VENTICELL 22 ECO' AMBIENT UP TO 250C, 22L (MC000210)

**IO0129** OVEN FORCED AIR CONVECTION 'VENTICELL 55 ECO' AMBIENT +10C UP TO 250C, VOLUME 55L, I.D. 400mmWx370mmDx350mmH, O.D. 620mmWx640mmDx680mmH, COMES WITH 2 CHROME PLATED TRAYS (MC000211)

Order by phone or online at www.rowe.com.au
Secador® 4.0 Horizontal Profile Desiccator Cabinets
Large Wide Storage Space
U.S. Patents: 6,834,920; 7,318,630 and D474,626
• Internal Volume: 1.87 cu. ft.; Holds: 70 cans
• Two removable shelves
• Pull down ‘oven style’ door
• Overall Dimensions:
  51.8W x 41.4D x 34.1cmH
  (20.4 x 16.3 x 13.4")

Dry-Keeper™ Vertical Desiccator Cabinet
Large Space
• Interior Volume: 2.01 cu.ft.; Holds: 70 cans
• Three removable shelves can be set in fifteen positions
• Methyl-methacrylate with sleek black accents
• Door opens to the right and is 25 x 45cm (10 x 177/8")
• Includes desiccant tray

Dry-Keeper™ Stacking Desiccator Cabinet
Stack up to Five Units
• Interior Volume: 0.35 cu. ft.; Holds: 13 cans
• Smoke-tinted, polystyrene
• Two removable shelves can be set at four heights
• Pull down door slides out of the way into a compartment located underneath the cabinet
• Includes a small tray for desiccant

Order by phone or online at www.rowe.com.au
Patented Electronic Dehumidification System - How it works:

Module features color-changing, dustless, silica gel desiccant beads and two fans. Automatic dehumidification and desiccant regeneration cycle operates continuously every 20 minutes as follows:

1. One fan operates for 14 minutes to draw interior chamber air across silica gel desiccant beads and dehumidify the chamber. One-way flap valves are open to the chamber and closed to the exterior during this phase.

2. Circulation fan is terminated and one (1) minute of resistance heat is applied to silica gel desiccant to initiate regeneration.

3. The regeneration fan is started and draws air in an opposite direction to the first fan. This causes one-way flap valves within the chamber to close and flap valves to the exterior environment to open. Four (4) minutes of resistance heat is applied to silica gel desiccant to release the captured moisture to the chamber exterior.

4. Resistance heat to silica gel is terminated. Circulation fan continues to operate for one (1) minute with exterior air so that silica gel can return to ambient temperature.

Secador® 4.0 Horizontal
Auto-Desiccator Cabinets

- Internal Volume: 1.87 cu. ft.; Holds: 70 cans
- Two removable shelves
- Pull down ‘oven style’ door
- Overall Dimensions: 51.8W x 41.4D x 34.1cmH (20.4 x 16.3 x 13.4’’)

Rowe code PD1516 F42074 4.0 Clear, 230V
**Secador® 2.0, 3.0 and 4.0 Auto-Desiccator Cabinets**

**Size Specifications**

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Interchangeably Stackable up to 3 Units High

All units have a compact 34.1W x 41.4cmD (13.4 x 16.3") footprint

- Doors open to the left
- Different colors are available to suit your needs

**ROWE CODE**  **CATALOG NO.**  **MODEL**  **DESCRIPTION**

| CS4240  | F42072-1220  | 2.0 Clear 1.2 cu. ft. 31.4cm (12.4") |
| PD1512  | F42073-1220  | 3.0 Clear 1.6 cu. ft. 41.7cm (16.4") |
| CS4241  | F42073-1228  | 3.0 Amber (50+% visible light blocking) 1.6 cu. ft. 41.7cm (16.4") |
| PD1510  | F42074-1220  | 4.0 Clear 1.9 cu. ft. 51.8cm (20.4") |

**DESICCANTS**

- **CS7482** SILICA GEL SELF INDICATING 2-5mm ORANGE (*R207+)
- **CS7455** SILICA GEL SELF INDICATING GRANULES 5-10 MESH BLUE (*R207+)
- **CD2565, CD2566, PD1507** DESICCATOR DESI-CAN DESSICANT CANISTER (F420460000).
- **CD1958** DESICCATOR CARTRIDGES, DIAM. 65mm (2.5 inch)
- **CD1959** DESICCATOR CARTRIDGES, DIAM. 100mm (4 inch)

We can also help you with CRM's (Certified reference materials) and solid standards.
Secador® Gas-Ported Desiccator Cabinets
Wide range of sizes for those who require gas purged desiccation. Rear gas ports accept ¼” I.D. tubing.

- Durastar® co-polyester construction blocks 99% of UV light* and is resistant to staining, crazing and chemical attack; amber color units also block over 50% visible light.

- Large doors maximize access to interior space and have a patented seal design, tab latches and security loops for a padlock or tamper-evident seals.

- Perforated shelves facilitate circulation of dry air.

- Valves can be closed to use standard desiccants.
GAS - PORTED DESICCATORS

- All units have a compact 34.1W x 41.4cmD (13.4 x 16.3”) footprint
- Doors open to the left
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<tr>
<td>PD1503</td>
<td>F42071-0002</td>
<td>1.0</td>
<td>Clear, with Gas Ports</td>
</tr>
<tr>
<td>PC1560</td>
<td>F42072-1002</td>
<td>2.0</td>
<td>Clear, with Gas Ports</td>
</tr>
<tr>
<td>IC0355</td>
<td>F42072-1009</td>
<td>2.0</td>
<td>Amber, with Gas Ports (50+% visible light blocking.)</td>
</tr>
<tr>
<td>TBA</td>
<td>F42074-1009</td>
<td>4.0</td>
<td>Amber, with Gas Ports (50+% visible light blocking.)</td>
</tr>
</tbody>
</table>

Secador® 4.0 Horizontal Profile Gas-Ported Desiccator Cabinet

- Internal Volume: 1.87 cu. ft.; Holds: 70 cans
- Two removable shelves
- Pull down ‘oven style’ door
- Interchangeably stackable up to 3 units
- Overall Dimensions: 51.8W x 41.4D x 34.1cmH (20.4 x 16.3 x 13.4”)

VACUUM PUMPS FOR PORTED DISICCATORS

- **IP1880 PUMP**
  - VACUUM DIAPHRAGM TYPE
  - 18.4L/min (JAVAC)

- **IP2034 VACUUM PUMP OIL FREE**
  - PISTON R-SERIES
  - 34L/min 120mbar ULTIMATE VACUUM (JAVAC)
We can help with all of your laboratory chemicals, consumables and equipment. Online 24 hours 7 days a week, by phone or face to face, we give you the choice.