SP Bel-Art







Desiccation

STANDARD | AUTOMATIC | GAS PURGE | VACUUM

belart.com



DESICCATORS

Desiccators are an economical and reliable way to ensure dry, dust-free storage and organization of humidity sensitive products such as valuable reagents, electronics or standards.
Proper storage conditions can be optimized by selecting a desiccator size, shape and control mechanism best suited to your application, space requirements, and items being stored.
The four basic types of desiccation are standard, automatic, gas purge and vacuum.

When choosing a desiccator the following questions should be considered:

1. What storage environment is optimal or required?

Use this chart for an overview of the environment and benefits each method of desiccation provides.

Methods of Desiccation

Standard Desiccant	Automatic Dehumidification	Gas Purge	Vacuum
Manual monitoring and operation. Moisture is absorbed from air in the unit by using a desiccant. Once the desiccant is 'saturated' it must be replaced.	Electric fans and drying units dehumidify internal air to maintain a low humidity environment.	A slow steady flow of inert gas (often dry nitrogen) is provided.	Air and moisture are removed from the chamber through use of a vacuum pump.
Flexibility to use any type of desiccant (silica gel beads, activated charcoal, etc.) based on economics and convenience.	Convenience, requires minimal monitoring and no need for desiccants.	Best for materials that are damaged by air.	Best for ultra-dry storage conditions.
Portability, as the unit does not require electricity or gas/vacuum lines.	Some models offer precise control of humidity at desired levels.	Dust free and desirable for many applications including clean room environments.	Dust free and desirable for many applications including clean room environments.
		Flexibility: Units can be used as standard desiccators by closing stopcocks and adding desiccant.	Flexibility: Units can be used as standard desiccators by closing stopcocks and adding desiccant.

2. How do you choose the proper desiccator?

First decide what method of desiccation best suits your needs. Each method has its unique advantages and trade-offs.
Standard desiccators typically use desiccant cartridges and are economical, but they require monitoring so that cartridges can be changed as needed to maintain a continuous dry environment. Automatic dehumidification desiccators operate automatically requiring minimal monitoring and no worries about samples being compromised, but are generally more expensive than standard desiccators. Vacuum desiccators remove air and moisture with the use of an in-house laboratory vacuum or vacuum pump and can be brought back to vacuum easily after opening. Vacuum desiccators can also be used for degassing techniques. Gas purge desiccators are available for desiccation with gases such as argon and nitrogen to achieve oxygen-free environments.

3. How do you know what style and size of desiccator to choose?

Identify the size of the items you need to store and in what quantity. Where the desiccator will be housed, its interior volume, and shelving options should be considered. Both round and cabinet style desiccators range in size from small to large.
Round style desiccators typically have one shelf, and a domed top to provide extra vertical space. Cabinet style desiccators tend to have easier accessibility, greater storage capacity and may have stacking ability to save exterior space. They often have multiple shelves, many of which are adjustable to suit your needs. Traditionally vacuum desiccators were only available in round style since a square shape would be expected to implode under vacuum. SP Bel-Art Jeio Tech desiccators, however, have overcome this concern and can withstand the vacuum, so they provide the benefits of vacuum desiccation with the ability to store more items with easier access and in less space.

Method	Standard Desiccant	Auto Dehumidification	Gas Purge	Vacuum
Most Economical	X			
Most Portable	X			
Easiest to Use		X		
Best for Frequent Access	X	X		
Best for Ultra-Dry Conditions				X
Best for Clean Room Applications			X	X
Best for Air-Sensitive Materials			X	

BRAND DETAILS

Secador® Desiccator Cabinets

A UV Light Blocking, Dry Environment



- Easy and reliable storage of moisture and UV sensitive products
- Standard, Automated (100, 120 and 230 VAC) and Gas-ported models available
- Polycarbonate 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

**Mini cabinets, molded of polystyrene, and Secador 5.0 models do not block UV light.*

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SP Bel-Art Jeio Tech Vacuum Desiccators

Sustained Vacuum Integrity Up to 3X Longer Than Other Brands



- Able to maintain 29in.-Hg vacuum for over 72 hours at room temperature, they provide vacuum integrity resulting in lower maintenance and greater peace of mind
- 3-way valve offers consistent and uniform vacuum draw, vacuum release, or gas exchange
- Analog vacuum gauge
- Amber tinted UV blocking models block 100% of UV-A, -B, and -C light

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Dry-Keeper™ Desiccator Cabinets

Clear View, Cabinet Style Desiccators in Polystyrene or Acrylic



- Automated and standard units with a variety of choices in size, horizontal or vertical profiles and various materials
- Adjustable shelving with holes for full air circulation
- Shelf rails provide flexibility for optimum placement of shelves
- Automatic units have a permanent desiccant that lowers relative humidity to 30-40% and a light indicator to signal absorption and regeneration periods

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"SPACE SAVER" Standard and Vacuum Desiccators

Maximize Your Space in the Laboratory or Classroom



- Use less than 12" of benchtop space
- 'Flat Dome,' clear polycarbonate top maximizes interior clearances
- Vacuum models hold a full vacuum (29.9" Hg, 75.9cm) at room temperature for 24 hours; non-vacuum models also available
- White polypropylene bottom models can support incandescent crucibles on Minerit HD High Heat Ceramic Desiccator Plates

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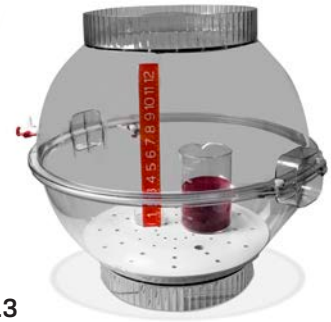
Techni-Dome® 360 Vacuum or Gas-Ported Desiccators

View More, Store More, Dry More



- Spacious 65 liter (4000 cu. in.) internal volume can hold items up to 45cm (18") tall or wide, including racks, trays and instruments
- Polycarbonate material is resistant to most common chemicals, as well as thermal stress, and wipes clean easily
- Available with one or two gas ports to offer the flexibility of using multiple gases or faster cycle times between vacuum and release
- Holds a full vacuum (29" Hg, 737mm) at room temperature for 24 hours

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Secador® Desiccator Cabinets

A UV Light Blocking, Dry Environment

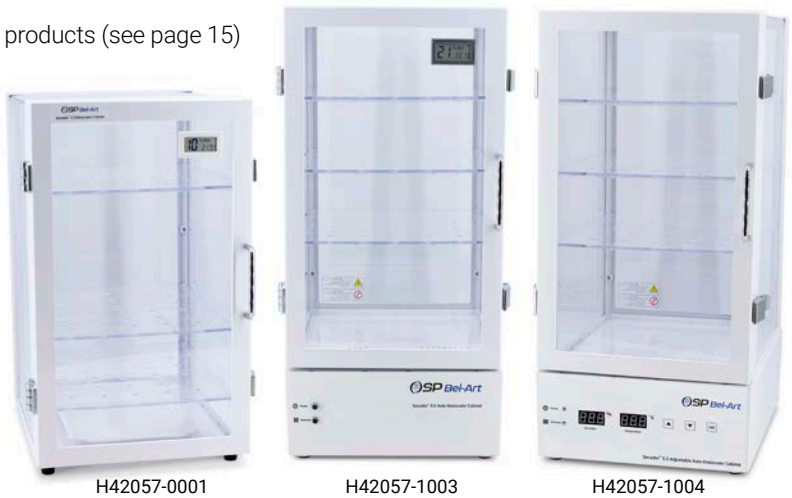
Secador® 5.0 Desiccator Cabinets

- High density foam gaskets keep ambient humidity out and dry air inside
- Clear polycarbonate panels are durable and allow for easy viewing of contents
- LCD displays internal temperature and humidity level
- Non-electronic model can be used with any Bel-Art desiccant products (see page 15)
- Includes 3 adjustable and removable shelves

Note: Secador 5.0 models do not block UV light

STANDARD DESICCANT — H42057-0001

AUTO. DEHUMIDIFICATION — H42057-1003, H42057-1004



H42057-0001 H42057-1003 H42057-1004

Catalog No.	Description	Electronic Dehumidification	Adjustable Humidity Control	Humidity Control Range	Internal Dimensions (W x D x H)	External Dimensions (W x D x H)
H42057-0001	Secador 5.0 Desiccator Cabinet	No	No	Desiccant required	28cm x 34cm x 50cm	30cm x 38cm x 52cm
H42057-1003	Secador 5.0 Auto-Desiccator Cabinet	Yes 110-240VAC	No	Maintains 25 to 40%	28cm x 34cm x 50cm	30cm x 38cm x 63.5cm
H42057-1004	Secador 5.0 Adjustable Auto-Desiccator Cabinet	Yes 110-240VAC	Yes	Adjustable from 20 to 40% rH	28cm x 34cm x 50cm	30cm x 38cm x 63.5cm
F42057-1001	Secador 5.0 Spare Shelf					

Secador® 1.0, 2.0, 3.0, 4.0 and 5.0 Desiccator Cabinets

- Polycarbonate 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
- Perforated shelves facilitate circulation of dry air; space for desiccant under bottom shelf
- Easy-to-view digital hygrometer is located in the door front; side swinging door opens to the left
- Compact 34.1W x 41.4cmD footprint for space saving stacking up to 3 units high*
- Replacement shelves available; 4.0 units can be converted from vertical to horizontal configuration or vice versa by turning the unit and ordering the appropriate number of shelves.
- Can be used with Bel-Art desiccant products (see page 15)



⚠ See back page

*Models 1.0, 2.0, 3.0, 4.0 only
†Model 5.0 only

Catalog No.	Description	Internal Volume	# of Shelves	Height
Model 1.0 – Vertical				
F42071-0000	Clear	0.7 cu. ft.	1 (fixed)	21.3cm (8.4")
F42071-0008	Amber (50+% visible light blocking.)	0.7 cu. ft.	1 (fixed)	21.3cm (8.4")
Model 2.0 – Vertical				
F42072-1000	Clear	1.2 cu. ft.	2	31.4cm (12.4")
F42072-1008	Amber (50+% visible light blocking.)	1.2 cu. ft.	2	31.4cm (12.4")
Model 3.0 – Vertical				
F42073-1000	Clear	1.6 cu. ft.	3	41.7cm (16.4")
F42073-1008	Amber (50+% visible light blocking.)	1.6 cu. ft.	3	41.7cm (16.4")
Model 4.0 – Vertical				
F42074-1000	Clear	1.9 cu. ft.	3	51.8cm (20.4")
F42074-1008	Amber (50+% visible light blocking.)	1.9 cu. ft.	3	51.8cm (20.4")
Model 4.0 – Horizontal				
F42074-0000	Clear	1.9 cu. ft.	2	34.1cm (13.4")
Model 5.0 – Vertical				
H42057-0001	Secador 5.0 Desiccator Cabinet	1.7 cu. ft.	3	52cm (20.5")

Secador® 1.0 Carrying Case Desiccators

- Large door maximizes access to interior space and has a patented seal design, tab latches and security loops for a padlock or tamper-evident seals; opens top to bottom
- Includes built-in suitcase style carrying handle and two removable shelves
- Perforated shelves facilitate circulation of dry air; space for desiccant under bottom shelf
- Easy-to-view dial hygrometer located on pull down 'oven style' door
- Can be used with Bel-Art desiccant products (see page 15)
- Dimensions: 21.3W x 41.4D x 37.3cmH (8.4 x 16.3 x 13.4")



Catalog No.	Model	Description
F42070-0000	1.0	Carrying Case, Clear

Secador® Mini Desiccators Cabinet

- Large side swinging door maximizes access to interior space; has a patented seal design, tab latches and security loops for padlock or tamper-evident seals; opens right to left
- Easy-to-view dial hygrometer located in the door front
- Clear polystyrene for easy viewing of contents
- Can be used with Bel-Art desiccant products (see page 15)
- Overall Dimensions: 33.8W x 25.4D x 21.6cmH (13.3 x 10 x 8.5")
- Internal Volume: 0.3 cu.ft.



Catalog No.	Description
F42075-1000	Mini, Clear Polystyrene

Secador® Mini, 1.0, 2.0, 3.0 and 4.0 Gas-Purge Desiccator Cabinets





- Rear mounted gas ports are tapered to accept tubing with ¼ to ⅜" I.D.
- Compact 34.1W x 41.4cmD footprint for space saving stacking up to 3 units high
- Replacement shelves available; 4.0 units can be converted from vertical to horizontal configuration or vice versa by turning the unit and ordering the appropriate number of shelves
- Gas ports can be closed to use desiccator with standard Bel-Art desiccant products (see page 15)

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Catalog No.	Model	Description	Internal Volume	# of Shelves	Height
Vertical					
F42071-0002	1.0	Clear, with Gas Ports	0.7 cu. ft.	1 (fixed)	21.3cm (8.4")
F42071-0009	1.0	Amber, with Gas Ports (50+% visible light blocking.)	0.7 cu. ft.	1 (fixed)	21.3cm (8.4")
F42072-1002	2.0	Clear, with Gas Ports	1.2 cu. ft.	2	31.4cm (12.4")
F42072-1009	2.0	Amber, with Gas Ports (50+% visible light blocking.)	1.2 cu. ft.	2	31.4cm (12.4")
F42073-1002	3.0	Clear, with Gas Ports	1.6 cu. ft.	3	41.7cm (16.4")
F42073-1009	3.0	Amber, with Gas Ports (50+% visible light blocking.)	1.6 cu. ft.	3	41.7cm (16.4")
F42074-1002	4.0	Clear, with Gas Ports	1.9 cu. ft.	3	51.8cm (20.4")
F42074-1009	4.0	Amber, with Gas Ports (50+% visible light blocking.)	1.9 cu. ft.	3	51.8cm (20.4")
Horizontal					
F42074-0002	4.0	Clear, with Gas Ports	1.9 cu. ft.	2	34.1cm (13.4")
F42075-1002	Mini	Clear, with Gas Ports	0.3 cu. ft.	-	27.9cm (11")

Secador® 2.0, 3.0, 4.0 and 5.0 Auto-Desiccator Cabinets

- Automatic dehumidification operates continuously ensuring a maintanence-free dry environment
- Large doors with easy-to-view digital hydrometer maximizes access to interior space; includes patented seal design and tab latches; Vertical models open right to left. Door swings down on horizontal models.
- Choose from an extensive selection of sizes, styles and colors in 100, 120, or 230V (CE marked) models for use worldwide.
- 230V units include power cord/transformer that includes North American, Australian, UK and European plug configurations.*
- Our newest product line, Secador 5.0, features an adjustable model to set and control interior humidity levels between 20-40% rH.†

*Models 2.0, 3.0, 4.0 only
†Model 5.0 only

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Catalog No.	Model	Color	Internal Volume	Height
100V – Vertical				
F42072-1100	2.0	Clear	1.2cu. ft.	31.4cm (12.4")
F42073-1100	3.0	Clear	1.6cu. ft.	41.7cm (16.4")
F42074-1100	4.0	Clear	1.9cu. ft.	51.8cm (20.4")
120V – Vertical				
F42072-1115	2.0	Clear	1.2cu. ft.	31.4cm (12.4")
F42072-1118	2.0	Amber	1.2cu. ft.	31.4cm (12.4")
F42073-1115	3.0	Clear	1.6cu. ft.	41.7cm (16.4")
F42073-1118	3.0	Amber	1.6cu. ft.	41.7cm (16.4")
F42074-1115	4.0	Clear	1.9cu. ft.	51.8cm (20.4")
F42074-1118	4.0	Amber	1.9cu. ft.	51.8cm (20.4")
120V – Horizontal				
F42074-0115	4.0	Clear	1.2cu. ft.	34.1cm (13.4")
230V – Vertical				
F42072-1220	2.0	Clear	1.2cu. ft.	31.4cm (12.4")
F42072-1228	2.0	Amber	1.2cu. ft.	31.4cm (12.4")
F42073-1220	3.0	Clear	1.6cu. ft.	41.7cm (16.4")
F42073-1228	3.0	Amber	1.6cu. ft.	41.7cm (16.4")
F42074-1220	4.0	Clear	1.9cu. ft.	51.8cm (20.4")
F42074-1228	4.0	Amber	1.9cu. ft.	51.8cm (20.4")
230V – Horizontal				
F42074-0220	4.0	Clear	1.9cu. ft.	34.1cm (13.4")
Secador 5.0 – Vertical				
H42057-1003	5.0	Clear	1.7cu. ft.	63.5cm (25")
H42057-1004	5.0	Clear	1.7cu. ft.	63.5cm (25")

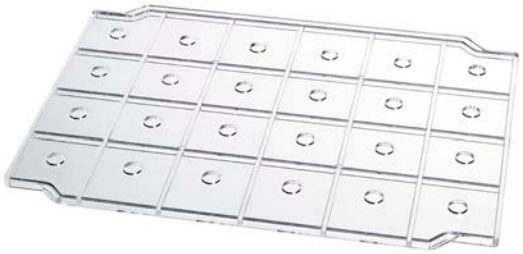
Secador® Refrigerator Ready Desiccator



- Extra-long depth, pull-out shelves and wide rubber feet; perfect for use inside refrigerators and -20˚C freezers
- Top shelf holds up to three (3) Desi Cans™ (F42046-0000) or up to two (2) Desiccant Cartridges (F42049-0100); permits maximum visibility of saturation status
- Locking door latch turns with one hand; door opens from top down for easy access

Catalog No.	Capacity	Exterior Dimensions (W x D x H)
F42011-0000	0.6cu. ft.	25.4 x 38.1 x 21.6cm (10 x 15 x 8½")

Secador® Cabinet Replacement Shelves



Perforated, clear polystyrene shelves fit most Secador® standard, gas-purge and automatic desiccator models.

- 4.0 units can be converted from vertical to horizontal configuration or vice versa by turning the unit and ordering the appropriate number of shelves

Catalog No.	Description
F42074-1001	Fits 1.0 (non-carrying case), 2.0, 3.0 and 4.0 (vertical) Models
F42057-1001	Fits 5.0

Secador® 1.0, 2.0, 3.0 and 4.0 Auto-Desiccator Module Desiccant Replacement Beads

- These color-indicating silica gel beads are for use in refilling the Secador® 1.0, 2.0, 3.0, and 4.0 auto-desiccator module which automatically regenerates them for thousands of cycles.
- Beads contain a color-changing moisture indicator that turns from blue to light pink, indicating that the silica gel is saturated and cannot absorb additional moisture
- When beads turn pink/dark brown, and fail to regain their blue color, it is time to replace the beads with a fresh supply



Catalog No.	Description
F42074-0020	26g Bottle to fill Secador® Auto-Desiccator Modules

Secador® Digital Hygrometer

- These replacement digital hygrometers fit any Secador® Desiccator 1.0, 2.0, 3.0, 4.0 equipped with a door mounted hygrometer.
- Displays a 2-digit number followed by %rH for relative humidity (rH) values between 10% and 80%rH (%rH values below 10% will show "<10%rH" and %rH values above 80% will show ">80%rH")
- Powered by a CR-2032 Battery; approximately 1 year battery life



Catalog No.	Quantity/Pack
H42070-1400	1



SP Bel-Art Jeio Tech Vacuum Desiccators

Sustained Vacuum Integrity Up to 3X Longer Than Other Brands

Round Style SP Bel-Art Jeio Tech Vacuum Desiccators

Eliminate the guesswork; easy to view vacuum gauge

- Vacuum level checking is simplified with a built-in analog vacuum gauge at the top of the unit
- High-quality silicone O-ring and specially designed locking ring allow outstanding vacuum capability with virtually no leakage
- Locking ring secures top and bottom halves when vacuum not in use; provides additional convenience and safety when moving the unit
- Six models to choose from; 6, 10, and 20 liter internal volume in clear or UV blocking amber



Catalog No.	Description	Internal Volume	Internal Volume
F42400-2021	Round Vacuum Desiccator, 6 L	0.2 cu. ft.	6 L
F42400-2041	Round Vacuum Desiccator, 6 L, UV Amber	0.2 cu. ft.	6 L
F42400-2121	Round Vacuum Desiccator, 10 L	0.4 cu. ft.	10 L
F42400-2141	Round Vacuum Desiccator, 10 L, UV Amber	0.4 cu. ft.	10 L
F42400-2221	Round Vacuum Desiccator, 20 L	0.7 cu. ft.	20 L
F42400-2241	Round Vacuum Desiccator, 20 L, UV Amber	0.7 cu. ft.	20 L

Specifications

Catalog No.	Exterior Dims (W x H)	Net Weight	Shelves incl/Max	Max Wt/Shelf
F42400-2021 F42400-2041	28.6 x 35.4cm (11¼ x 13⅞")	1.7kg (3.75lb)	1/1	15kg (33lb)
F42400-2121 F42400-2141	35.3 x 40.0cm (13⅞ x 15¾")	2.6kg (5.75lb)	1/1	20kg (44lb)
F42400-2221 F42400-2241	42.7 x 47.5cm (16¾ x 18¾")	4.3kg (9.5lb)	1/1	25kg (55lb)

Cabinet Style SP Bel-Art Jeio Tech Vacuum Desiccators

Outstanding vacuum sustainment in a space maximizing cube

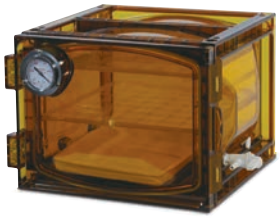




- Integrally molded cubic box design enables outstanding vacuum capability with virtually no leakage and exceptional durability
- Cabinet style provides maximum useable space
- Swinging door allows easy access; built in locking tabs secure the door when not under vacuum
- Analog vacuum gauge in front door allows vacuum level checking at a glance
- Perforated shelves can be repositioned to accommodate various storage needs (additional shelves available separately)
- Built-in ports permit attachment of up to 3 additional valves (sold separately)
- Stackable space-saving design allows efficient use of work space
- Eight models to choose from; 11, 23, 35, and 45 liter internal volume in clear or UV blocking amber



F42400-4001



F42400-4121



F42400-4031

Catalog No.	Description	Internal Volume	Internal Volume
F42400-4001	Cabinet Vacuum Desiccator, 11 L	0.4 cu. ft.	11 L
F42400-4101	Cabinet Vacuum Desiccator, 11 L,UV Amber	0.4 cu. ft.	11 L
F42400-4021	Cabinet Vacuum Desiccator, 23 L	0.8 cu. ft.	23 L
F42400-4121	Cabinet Vacuum Desiccator, 23 L, UV Amber	0.8 cu. ft.	23 L
F42400-4011	Cabinet Vacuum Desiccator, 35 L	1.2 cu. ft.	35 L
F42400-4111	Cabinet Vacuum Desiccator, 35 L, UV Amber	1.2 cu. ft.	35 L
F42400-4031	Cabinet Vacuum Desiccator, 45 L	1.6 cu. ft.	45 L
F42400-4131	Cabinet Vacuum Desiccator, 45 L, UV Amber	1.6 cu. ft.	45 L

Vacuum Desiccator Accessories

Catalog No.	Description	Fits	Quantity / Pack
H94240-4002	Viton® 3-Way Valve - SP Bel-Art Jeio Tech Cabinet Style	Vacuum Desiccators: F42400-4001, -4101, -4021, -4121, -4011, -4111, -4031, -4131	1
H94240-4003	Perforated Shelf – Cabinet Style	Vacuum Desiccators: F42400-4021, -4121, -4011, -4111, -4031, -4131	1
H94240-4004	Perforated Shelf – Cabinet Style	Vacuum Desiccators: F42400-4001, -4101	1

Specifications

Catalog No.	Exterior Dims (W x D x H)	Door Opening (W x H)	Net Weight	Shelves incl/Max	Max Wt/Shelf
F42400-4001 F42400-4101	32.2 x 28.5 x 27.1cm (12⅝ x 11¼ x 10⅝")	20.8 x 23.8cm (8⅛ x 9⅜")	4.2kg (9.25lb)	2/4	3kg (6.6lb)
F42400-4021 F42400-4121	42.0 x 39.7 x 28.1cm (16½ x 15⅝ x 11")	29.5 x 24.5cm (11⅝ x 9⅝")	8.2kg (18lb)	2/4	5kg (11lb)
F42400-4011 F42400-4111	42.0 x 39.7 x 38.1cm (16½ x 15⅝ x 15")	29.5 x 34.5cm (11⅝ x 13⅝")	10.8kg (23.75lb)	3/5	5kg (11lb)
F42400-4031 F42400-4131	42.0 x 39.7 x 49.1cm (16½ x 15⅝ x 19⅜")	29.5 x 44.5cm (11⅝ x 17½")	12.2kg (26.75lb)	3/6	5kg (11lb)



Economy Desiccators

A Variety of Choices in Size, Profiles And Various Materials

Dry-Keeper Stacking Desiccator Cabinet



- 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 small desiccant tray

⚠ See back page

Catalog No.	Dimensions (L x W x H)	Internal Volume
H42053-0001	25 x 25 x 25cm (10 x 10 x 10")	0.35 cu. ft

Dry-Keeper Small, Stacking Desiccator Cabinet



- Pull down door slides out of the way into a compartment located underneath the cabinet
- Ready to use jar of silica gel is included

⚠ See back page

Catalog No.	Dimensions (L x W x H)	Internal Volume
H42053-0000	21 x 22.5 x 17cm (8¼ x 8⅞ x 6¾")	0.14 cu. ft

Dry-Keeper Small, Stacking Gas-Purge Desiccator Cabinet



- Pull down door slides out of the way into a compartment beneath the cabinet
- Rear mounted gas ports are tapered to accept tubing with ¼ to ⅜" I.D.
- Interior volume: 0.1 cu. ft
- Gas ports can be closed to use desiccator with standard Bel-Art desiccant products (see page 15)

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Catalog No.	Dimensions (L x W x H)	Internal Volume
H42053-0002	21 x 27 x 17cm (8¼ x 10⅝ x 6¾")	0.1 cu. ft

Dry-Keeper Horizontal Desiccator Cabinets



H42058-0001



H42058-0003

- Gasketed door opens down and closes with two latches for a tight seal
- Large, in-door digital hygrometer for easy visualization of rH%
- Horizontal configuration perfect for storage of wider items, trays, and storage bins

⚠ See back page

Catalog No.	Dimensions (L x W x H)	Internal Volume
H42058-0001	50 x 39 x 34.5cm (19⅝ x 15½ x 13½")	2 cu. ft
H42058-0003	61.6 x 39.4 x 34.5cm (24¼ x 15½ x 13½")	2 cu. ft

"Space Saver" Desiccators



- 'Flat Dome,' clear polycarbonate top with knob maximizes interior clearances and provides an average of 13% greater interior volume over standard hemispherical domes
- Large ribbed knob for easy lifting of top; extra heavy walls
- All models include a 0.32 cm (⅛") thick perforated plate; disposable or reusable desiccant can be placed on or under this plate
- A neoprene O-ring assures a tight seal down to 0˚C without the need for grease (ring will not be harmed if grease is used.)
- White polypropylene bottom can support incandescent crucibles on High Heat Minerit HD Ceramic Desiccator Plate (F42038-0230)



⚠ See back page

Catalog No.	Volume	Flange O.D.	Inside Diameter	Plate Diameter	Overall Height	Clearance Above Plate
F42030-0000	0.09 cu. ft.	17.1cm (6¾")	14.9cm (5⅞")	14cm	20.6cm (8⅛")	12.1cm (4¾")
F42031-0000	0.20 cu. ft.	23cm (9 1/16")	19.7cm (7¾")	19cm	26cm (10¼")	15.7cm (6 3/16")
F42032-0000	0.31 cu. ft.	27.3cm (10¾")	24cm (9 7/16")	23cm	31.1cm (12⅛")	19.7cm (7¾")

"Space Saver" Vacuum Desiccators



- Holds a full vacuum (29.9" Hg) at room temperature for 24 hours
- Tapered polypropylene stopcock with PTFE plug (F42040-0000) accepts tubing with ¼ to ⅜" I.D. and allows a controlled entrance of air preventing unnecessary turbulence
- Neoprene O-ring assures a tight seal down to 0˚C without the need for grease (ring will not be harmed if grease is used)
- 'Flat Dome,' clear polycarbonate top with large ribbed knob maximizes interior clearances and provides an average of 13% greater interior volume over standard hemispherical domes
- All models include a 0.32 cm (⅛") thick perforated plate; disposable or reusable desiccant can be placed on or under this plate
- White polypropylene bottom models can support incandescent crucibles on Minerit HD High Heat Ceramic Desiccator Plate (F42038-0230)

⚠ See back page

Catalog No.	Volume	Flange O.D.	Inside Diameter	Plate Diameter	Overall Height	Clearance Above Plate
White Polypropylene Bottom - *Can support incandescent crucibles on Minerit HD High Heat Desiccator Plates, available separately*						
F42010-0000	0.09 cu. ft.	17.1cm (6¾")	14.9cm (5⅞")	14cm	20.6cm (8⅛")	12.1cm (4¾")
F42020-0000	0.20 cu. ft.	23cm (9 1/16")	19.7cm (7¾")	19cm	26cm (10¼")	15.7cm (6 3/16")
F42025-0000	0.31 cu. ft.	27.3cm (10¾")	24cm (9 7/16")	23cm	31.1cm (12⅛")	19.7cm (7¾")
All-Clear Polycarbonate Bottom - *Offers increased viewing visibility from more angles*						
F42012-0000	0.09 cu. ft.	17.1cm (6¾")	14.9cm (5⅞")	14cm	20.6cm (8⅛")	12.1cm (4¾")
F42022-0000	0.20 cu. ft.	23cm (9 1/16")	19.7cm (7¾")	19cm	26cm (10¼")	15.7cm (6 3/16")
F42027-0000	0.31 cu. ft.	27.3cm (10¾")	24cm (9 7/16")	23cm	31.1cm (12⅛")	19.7cm (7¾")

Techni-Dome® Vacuum Desiccator

- Use to degas liquids, porous solids, or silicon molds to eliminate air bubbles
- Spacious 65 liter (4000 cu. in.) internal volume can hold items up to 45cm (18") tall or wide, including racks, trays and instruments
- Holds a full vacuum (29" Hg) at room temperature for 24 hours
- Laboratory grade polycarbonate provides a clear, unobstructed view of contents; resistant to most common chemicals and thermal stress
- Side handles provide easy portability and can be used to affix a lock or tamper-evident seals
- Gas ports can be closed to use desiccator with standard Bel-Art desiccant products (see page 15)
- Includes two removable polypropylene shelves; 36.5cm(14.5") and 22.5cm (9")

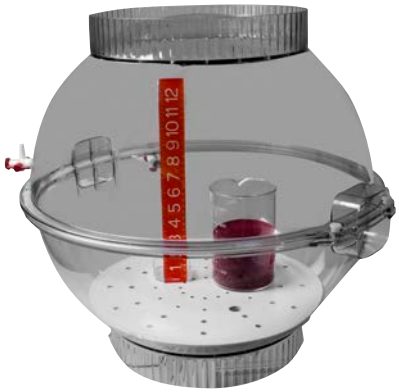


See back page

Catalog No.	Description	Dimensions (W x H)
F42029-0000	Techni-Dome® Vacuum Desiccator (1 gas port)	60 x 60cm (22 x 22")

Techni-Dome® Gas-Purge Desiccator

- Spacious 65 liter (4000 cu. in.) internal volume can hold items up to 45cm (18") tall or wide, including racks, trays and instruments
- Two gas ports are tapered and accept tubing with ¼ to ⅜" I.D.; easy turning PTFE stopcocks facilitate turbulence-free entrance of gases, minimizing disturbance of contents
- Polycarbonate construction is resistant to most common chemicals, as well as thermal stress; wipes clean easily
- Includes two removable, polypropylene, 36.5cm(14.5") and 22.5cm (9") diameter shelves
- Side handles provide easy portability and can be used as a place to affix tamper-evident seals
- Gas ports can be closed to use desiccator with standard Bel-Art desiccant products (see page 15)



See back page

Catalog No.	Description	Dimensions (W x H)
F42029-0001	Techni-Dome® Gas-Ported Desiccator (2 gas ports)	60 x 60cm (22 x 22")

Grande Desiccator Cabinet - Automatic

- Clear on all sides for quick visualization of desiccator contents
- Rugged copolyester side and top panels and a polycarbonate door and rear panel for long life
- Included desiccant is housed in a pre-programmed module that continually regenerates the desiccant every 20 minutes; operates on 120V
- Pull-out, perforated acrylic shelves (2 included) allow maximum air circulation and have built-in stops to prevent accidental tipping; maximum weight per shelf: 10lbs (4.5kg)
- Shelves are removable to allow use as a single, spacious chamber for specific storage needs; cabinet can hold up to seven shelves spaced 2" apart; extra shelves (pack of 2) sold separately – F43000-0001
- Door hinges located on right side



See back page

Catalog No.	Internal Volume	Interior Dimensions (W x D x H)	Exterior Dimensions (W x D x H)
F43020-1010	3.6 cu. ft.	47 x 51 x 43.2cm (18½ x 20 x 17")	66 x 61 x 66cm (26 x 24 x 26")

Grande Desiccator Cabinet - Gas Purge

- Clear on all sides for quick visualization of desiccator contents
- Rugged copolyester side and top panels and apolycarbonate door and rear panel for long life
- Includes two gas port fittings with stopcock valves located on back panel to utilize a dry gas of your choice as desiccant
- Pull-out, perforated acrylic shelves (2 included) allow maximum air circulation and have built-in stops to prevent accidental tipping; maximum weight per shelf: 10lbs (4.5kg)
- Shelves are removable to allow use as a single, spacious chamber for specific storage needs; cabinet can hold up to seven shelves spaced 2" apart; extra shelves sold separately – F43000-0001
- Door hinges located on right side



See back page

Catalog No.	Internal Volume	Interior Dimensions (W x D x H)	Exterior Dimensions (W x D x H)
F43010-1010	3.6 cu. ft.	47 x 51 x 43.2cm (18½ x 20 x 17")	66 x 61 x 66cm (26 x 24 x 26")

Grande Desiccator Cabinet - Standard

- Clear on all sides for quick visualization of desiccator contents
- Rugged copolyester side and top panels and polycarbonate door and rear panel for long life
- Pull-out, perforated acrylic shelves (2 included) allow maximum air circulation and have built-in stops to prevent accidental tipping; maximum weight per shelf: 10lbs (4.5kg)
- Shelves are removable to allow use as a single, spacious chamber for specific storage needs; cabinet can hold up to seven shelves spaced 2" apart; extra shelves sold separately – F43000-0001
- Desiccant (sold separately) can be placed below bottom shelf; recommend use of Bel-Art Desiccant bag (F42045-0250)
- Door hinges located on right side



See back page

Catalog No.	Internal Volume	Interior Dimensions (W x D x H)	Exterior Dimensions (W x D x H)
F43000-1010	3.6 cu. ft.	47 x 51 x 43.2cm (18½ x 20 x 17")	66 x 61 x 66cm (26 x 24 x 26")

Mini Vacuum Desiccator



- Vacuum rating of 740mm Hg (29")
- Clear polycarbonate top for easy viewing of contents; white polypropylene bottom
- Stopcock with 2mm Teflon® PTFE plug accepts tubing with ¼" to ⅜" I.D.
- Peripheral flange around the bottom fits into two snap locks and seals the two halves against a Buna-N O-ring

See back page

Catalog No.	Internal Volume	Dimensions (Diam. x H)
F41099-0000	0.02 cu.ft.	17.5 x 12.6cm (6¾" x 5")

Vacuum Chamber and Plate



- One piece O-ring seals the clear polycarbonate top to white polycarbonate base plate
- Polypropylene stopcock with Teflon® PTFE plug and tapered hose barb accepts tubing with ¼" (6mm) I.D.

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Catalog No.	Internal Volume	Dimensions (Diam. x H)
F42043-0000	0.02 cu.ft.	22.8 x 16cm (9" x 6¼")



Desiccation Accessories

Maintain A Continuous Dry Environment With SP Bel-Art Desiccant Products

Desi-Can™ Reusable Desiccant Canister

- One canister of Reusable Desi-Can™ Canister maintains a safe level of humidity in 0.09 cubic meter (3 cubic ft.) of space
- Can be regenerated in a 150°C (300°F) oven in about 3 hours for unlimited life
- Monitor window shows pink when recharged and green when saturated



Catalog No.	Dimensions (L x W x H)	Quantity/Pack
F42046-0000	5.1 x 10.2 x 1.3cm (2 x 4 x ½")	1

Reusable Silica Gel Desiccant Cartridges

- Clear polypropylene dish allows instant visual inspection of silica gel, which changes in color from blue to pale pink as it absorbs moisture
- Highly porous mesh membrane covers the dish providing excellent moisture absorption
- Desiccant can be easily regenerated by heating cartridges in a 50°C (122°F) oven overnight or at 100°C (212°F) for 6 hours
- For more rapid drying, remove the membrane lid, transfer the spent gel crystals into a glass or porcelain dish, and place in a 150°C (300°F) oven for one hour
- Individually foil sealed



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Catalog No.	Cartridge Diameter	Desiccant	Quantity/Pack
F42049-0100	72 mm (2.84")	40g	6

Reusable Silica Gel Desiccant Bags

- Durable microfiber bag securely contains beads eliminating the risk of leakage and is unaffected by moisture
- Indicator dot changes from blue when dry to pink when moist to easily identify when recharging is needed
- Saturated gel can be regenerated by microwaving bag for 6 minutes
- May be regenerated repeatedly without degradation
- Arrives individually sealed in moisture-proof pouch

Catalog No.	Desiccant	Height	Length	Width	Quantity/Pack
F42045-0350	350g (0.75lb)	19cm (7.5")	10cm (4")	5cm (2")	1
F42045-0500	500g (1.0lb)	21cm (8.25")	15cm (6")	5cm (2")	1
F42045-1000	1000g (2.25lb)	25cm (9.75")	15cm (6")	6cm (2.25")	1



Desiccation

Drying Tubes with Tube Fittings



- Each tube is supplied with two polypropylene fittings with serrated tapered end that accept 6.4 to 9.5mm (¼ to ⅜") I.D. tubing
- Unbreakable polyethylene straight tubes; 16mm I.D. x 19mm O.D. (⅝ X ¾")
- Drying agent not included

Catalog No.	Description	Quantity/Pack
F19960-0000	10.2cm (4")	12
F19961-0000	15.2cm (6")	12
F19962-0000	20.3cm (8")	12
F19965-0000	Replacement Fittings	12

High Heat Minerit HD Desiccator

- Perforated with 6mm (0.25") diameter holes on 25mm (1") centers in a straight line pattern
- Fit SP Bel-Art "Space Saver" desiccators, in addition to other plastic desiccators of similar size



Catalog No.	Diameter	Thickness	Quantity/Pack
F42038-0140	14cm (5.5")	4.8mm (0.2")	1
F42038-0230	23cm (9.1")	4.8mm (0.2")	1

Fluo-Kem Lab-Thread Tape

- Provides a vacuum tight seal and eliminates ˝freezing˝ even after long periods
- Withstands temperatures from -250ºF to 500ºF
- Can be used on ground glass joints, desiccators, bell jars, freezedrying equipment, etc
- 0.0635mm (0.0025") thick, 12.7mm (½") wide x 7.6 meters long (300") per roll



Catalog No.	Quantity/Pack
F24020-0000	3

Replacement Stopcocks



- Plug is 3 way for vacuum draw, shut-off and vacuum release
- Taper fits on desiccator port
- Use on Desiccator Models: F42010, F42012, F42020, F42022, F42025, F42027, F41099, F42029 and F42043

Catalog No.	Description	Quantity/Pack
F42040-0000	Stopcock w/Plug, accepts tubing ¼ to ⅜" I.D.	1

⚠WARNING – Important information for California residents regarding Prop 65. Visit www.P65Warnings.ca.gov for more information.

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