

## CARE AND CLEANING

Correct care of your SCIENCEWARE® GRANDE DESICCATORS will maintain their appearance, utility, and life. Do not use abrasive cleansers which will leave scratches. We recommend the use of Bel-Art Products' Aquet™ Detergent, Cat. No. F17094-0020 or F17094-0030.

Every joint on these desiccators was factory sealed with high-quality silicon seals and the bolts were all tightened at the factory to exacting standards. Do not loosen any bolts; doing so will void the warranty. Inspect bolts for tightness at least 2 times per year. Gently Hand-tighten if needed. Over tightening can cause damage to the unit.

## IMPORTANT INFORMATION

### CAUTIONS for all Scienceware® Grande Desiccators:

- Do not place in front of a heating or air-conditioning duct
- Do not place near a heating device
- Do not place in direct sunlight
- Do not place in areas with smoke or steam
- Do not attempt to introduce vacuum inside the cabinet
- Do not attempt to introduce pressure in excess of 1 to 2 psi inside the cabinet
- Do not place any explosive or hazardous chemicals in the cabinets
- Do not autoclave
- Do not expose to organic solvents or concentrated acids
- Indoor use only
- Use only within ambient temperature range of 5° C to 40°C

The user should be aware that if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## INSTRUCTIONS



### Scienceware® Grande Desiccators

STANDARD	CATALOG NUMBER F43000-1010
AUTOMATIC	CATALOG NUMBER F43020-1010
GAS PURGE	CATALOG NUMBER F43010-1010
SHELVES	CATALOG NUMBER F43000-0001

### PRINCIPLES OF OPERATION

Each of the three Scienceware® Grande Desiccator maintains a desiccated environment in a specific manner:

Standard (F43000-1010) requires a user-supplied desiccant\* (Bel-Art Products recommends the color-indicating, rechargeable desiccant catalog number F42045-0250, Desiccant in a Cartridge). Instructions for installation are provided below.

Automatic (F43020-1010) utilizes the Scienceware® Auto-Desiccator Module to automatically and continually regenerate the color-indicating silica gel desiccant, providing worry-free desiccation. Instructions for installation are provided below.

Gas Purge (F43010-1010) is supplied with pre-drilled holes on the back panel and two gas port fittings with stop cock valves. Instructions for installation are provided below.

**\*NOTE:** Do not use concentrated acids as desiccants. Do not expose the desiccator to organic solvents as these materials may attack the plastics and cause crazing (hairline cracking). Such crazing could eventually weaken the desiccator. Should you have any questions or problems with the desiccators, please contact Bel-Art Products Technical Support for help.

### INSTRUCTIONS FOR ASSEMBLY AND USE

Standard (F43000-1010): No assembly is required. Remove desiccator from the box and remove the packaging materials from around the shelves (inside the unit). Place the desiccator on a flat horizontal surface, leaving room in front for the door to swing open. Place a desiccant of your choice\* (Bel-Art Products recommends the color-indicating, rechargeable desiccant catalog number F42045-0250, Desiccant in a Cartridge) in the space below the bottom shelf. Close door and secure both top and bottom latches with a 1/4 turn clockwise.



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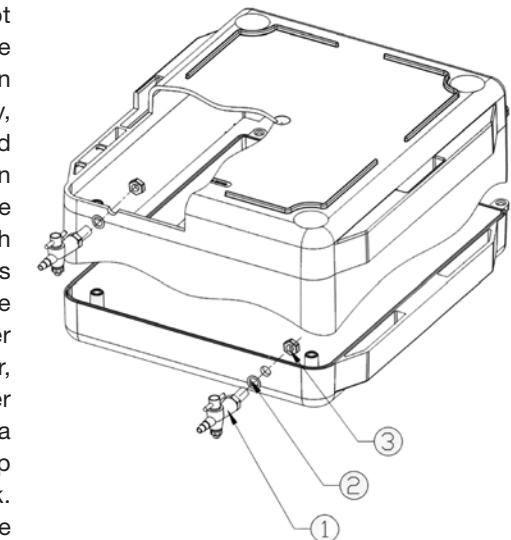
Automatic (F43020-1010): Installation of the Scienceware® Grande Auto-Desiccator is fast and easy. Remove desiccator from the box and remove the packaging materials from around the shelves (inside the unit). Place the desiccator on a flat horizontal surface, leaving room in front for the door to swing open. When placing the left side of the cabinet near a wall, be sure to leave several inches to ensure that Scienceware® Auto-Desiccator Module has room for proper venting. Next, connect the electrical cord to the supplied transformer. Locate the transformer and remove it from its packaging. Locate the electrical cord extending from the desiccator. With the transformer UNPLUGGED from the power source, fully insert each of the two terminals (located at the end of the electric cord) under each of the screw covers on the transformer (one terminal per screw cover). The Scienceware® Auto-Desiccator Module is not polarized so either terminal can be attached to either screw. Fasten the terminals to the transformer by tightening the screws with a screwdriver. Plug the transformer into a properly functioning 120VAC electrical outlet. The internal green light inside the Scienceware® Auto-Desiccator Module glows indicating the unit is in operation. Once plugged in, the dehumidifying cycle will start immediately and the cabinet's moisture will be absorbed by the silica gel beads contained within the Scienceware® Auto-Desiccator Module. This will be followed by a brief heating cycle within the electric unit and then by a discharge cycle when the moisture is released to the external atmosphere. Initially the cabinet should be left closed for approximately 8 hours to bring the relative humidity reading down into the 25% range. The Scienceware® Auto-Desiccator Module contains four air flow ports that are opened and shut by flapper valves. These valves were carefully aligned during factory installation to ensure proper function. DO NOT tamper with or pull on the valves. Close door and secure both top and bottom latches with a 1/4 turn clockwise.

Gas Purge (F43010-1010): Place the desiccator on a flat horizontal surface, leaving room in front for the door to swing open. Locate the two pre-drilled holes on the back of the desiccator. Referring to the illustration, slip one of the O-rings (Item 2) over the threaded end of the stopcock (Item 1). Insert the threaded end of the stopcock into one of the holes in the cabinet from the outside. Holding the stopcock in place with one hand screw the nut (Item 3) onto the threaded end by inserting your hand through the open door and hand tighten it. Using a 5/8" socket wrench, tighten the nut so the O-ring seats. Repeat the process with the second stopcock. Close door and secure both top and bottom latches with a 1/4 turn clockwise.

#### Parts list:

- Item 1 Stopcock (2)
- Item 2 O-ring (2)
- Item 3 Nut (2)

The gas ports permit creation of a gas-specific atmosphere. The cabinet is not designed to withstand negative pressure and there is a high danger of implosion if a vacuum line is connected. Similarly, high pressure gas entry is not advised as this may rupture the cabinet. If Carbon Dioxide, Nitrogen or other gas is to be introduced, make sure that both stopcocks are open. If the gas is heavier than air, the inlet source should be connected to the lower stopcock; if the gas is lighter than air, connect the inlet source to the upper stopcock. The gas should enter at a pressure of one to two psi to sweep out the air through the other stopcock. When it is felt that a sufficient exchange has been made, close the entry stopcock first then close the exit stopcock. This will avoid pressure build-up in the cabinet.



Shelving: Two shelves are supplied with every Scienceware® Grande Desiccator. Additional shelves (2 per pack) can be purchased as desired under Bel-Art Products Cat. No. F43000-0001. Each shelf will support a maximum of 10 lbs. Shelves can be repositioned as desired to rest upon any of the epoxy-coated wire rail supports except the top rail. Shelves are designed to slide back and forth and will extend forward approximately half the depth of the shelf. Under shelf guides prevent side to side motion and tall tail edges prevent accidental forward tipping of the shelf. To remove a shelf, slide the shelf forward and lift the front edge as needed so that the under shelf guides (both front and rear) can pass over the wire rail supports.

#### SPECIFICATIONS

#### CATALOG NO. F43000-1010, F43010-1010, and F43020-1010

Overall External Dims: 26" x 26" x 24" (W x H x D)

Construction Materials (Sides, Top, Bottom): Copolyester

Construction Materials (Shelves): Clear Acrylic

Construction Materials (Door and Rear Panel): Clear Polycarbonate