



Fritware® Porous Polyethylene Sheets

Pre-sized Sheets for Your Specific Applications

High-density polyethylene sheets are supplied in medium or coarse porosity. The medium porosity style has an average pore size of 70 microns, and the coarse porosity style averages 110 microns. Fritware® sheets can be cut, sawed, formed, machined and welded to fabricate special items made partly or wholly of this porous material. **Per sheet.**



| CATALOG NO. | THICKNESS | SIZE | POROSITY | MICRONS |
|-------------|---------------|----------------------|----------|---------|
| H13638-0018 | 3.2mm (1/8") | 91 x 91cm (36 x 36") | Medium | 45-90 |
| H13638-0514 | 6.4mm (1/4") | 46 x 46cm (18 x 18") | Medium | 45-90 |
| H13638-0518 | 3.2mm (1/8") | 46 x 46cm (18 x 18") | Medium | 45-90 |
| H13638-5116 | 1.6mm (1/16") | 46 x 46cm (18 x 18") | Medium | 45-90 |
| H13639-0518 | 3.2mm (1/8") | 46 x 46cm (18 x 18") | Coarse | 90-130 |

Fritware® Porous Rods

High-Density Polyethylene

Porous one foot polyethylene rods can withstand temperatures up to 93°C (200°F). Coarse grade porosity with an average pore size of 110 microns. **Per each, 6 rods of one size per case.**



| CATALOG NO. | DIAMETER | LENGTH | MICRONS |
|-------------|---------------|--------------|---------|
| F13635-0012 | 12.7mm (1/2") | 30.5cm (12") | 40-70 |
| F13635-0014 | 6.35mm (1/4") | 30.5cm (12") | 30-75 |



Gas Washing Bottle with Fritware® Dispersion Disc

Practical and Economical

Graduated 250ml polypropylene cylinder with a stable extended base for use in precipitating elements from gas. Gas is dispersed through a removable fitting that has a coarse grade porosity, polyethylene dispersion disc. The silicone stopper holds 6.3mm (1/4") O.D. tubes for entrance and exit of gas. 0.5 psi maximum pressure. **Per each, 6 per case.**



CATALOG NO.
H11030-0000

Gas Sampling Bulbs, 250cc

Hemispherical Ends for Smooth Gas Flow

Polypropylene gas sampling bulbs have polypropylene stopcocks with free-turning Teflon® PTFE plugs. Ends accept 6.4 to 9.5mm (¼ to ⅜") I.D. tubing. Tube body is 5.1cm (2") O.D. x 22.2cm (8¾") long. Stopcocks are 6.4cm (2½") long. Maximum recommended pressure is 15 psi.

A. With 4mm straight bore stopcock on one end and silicone rubber septum mounted in screw fitting on the other end. Septum can withstand several injections. 6 septa included. Overall length 29cm (11⅞").

B. With 4mm straight bore stopcock on one end and 4mm 3-way stopcock on the other end. 3-way stopcock permits exit of gas to two points. Overall length 32cm (12½").

C. With 4mm straight bore stopcock on each end. Overall length 32cm (12½").

Per each, 6 of one style per case.



CATALOG NO.

A. F19955-0000

B. F19957-0000

C. F19953-0000



Gas Dispersion Tube

Features Fritware® Porous Polyethylene Disc

High-density polyethylene bell-mouthed fitting with a sealed-in, coarse porosity polyethylene disc at the large end results in smaller bubbles. A 30.5cm long (12") x 6.35mm ID (¼") low-density polyethylene tube is fitted to the other end and is suitable for insertion into small openings. O.D. of bell is 2.54cm (1"). **4 per bag, 6 bags per case.**



CATALOG NO.

F13691-0000

Vacuum Traps

Vacuum trap and cap are made from corrosion and chemical-resistant polypropylene to provide ideal protection of vacuum sources from contaminants. Tube volume is 100ml and measures 32 x 160mm long. The pressure-fitting cap features an inlet and outlet to fit 7.9mm (5/16") ID tubing. Autoclave-safe at 121°C (250°F). **6 per pack.**



CATALOG NO.

F19919-0000

DESCRIPTION

Vacuum traps with caps, pack of 6

Frigimat® Dry Ice Makers



Frigimat® Dry Ice Maker

Produce the Dry Ice You Need Right in the Lab

Eliminates the need to buy large quantities of dry ice when only a little is needed. It employs the Joule-Thomson effect to produce a solid 454gm (16 oz) block of dry ice in one to two minutes, and the block can be removed in just 30 seconds. A brass relief valve safely vents excess gas. Each 50lb. cylinder of liquid CO₂ with a dip tube will make 8 or 9 blocks of dry ice, each measuring 8.5cm (3 $\frac{3}{8}$ ") x 11cm (4 $\frac{3}{8}$ ") long. Made of epoxy-coated steel with an aluminum ice chamber and brass valves with four non-skid rubber feet. Includes

a 1.8m (6 feet) nickel plated copper connecting tube with standard CGA 320 (0.830"-14) thread couplings for easy attachment to an LCO₂ cylinder. Dimensions: 30 x 17 x 13cm (12 x 6 $\frac{1}{2}$ x 5") high. Shipping weight: 5.5kg (12 lbs).

BRASS

CATALOG NO.

H38878-0010

H38878-0012

H38878-0013

DESCRIPTION

Frigimat® Dry Ice Maker (U.S. Model)

Europe Model

Japan Model

Economy Frigmat® Dry Ice Maker

Low-Density Polyethylene Chamber for Molding Dry Ice

Produces a solid 454gm (16 oz) block of dry ice in one to two minutes. Each 50lb. cylinder of liquid CO₂ with a dip tube will make 8 or 9 blocks of dry ice measuring 9.2 x 10.4cm long (3 $\frac{5}{8}$ x 4"). The polyethylene ice chamber is held in place by a metal clamping mechanism, and a porous polyethylene diffusion plate vents excess gas. Also features a built-in gas pressure gauge and relief valve. The epoxy-coated steel frame has four non-skid rubber feet to prevent sliding. Includes a 1.8m (6 ft) nickel plated copper connecting tube with standard CGA 320 (0.830"-14) thread couplings for easy attachment to a LCO₂ cylinder. Overall dimensions are 37 x 14 x 15cm H (14 $\frac{3}{4}$ x 5 $\frac{1}{2}$ x 6"H) with a shipping weight of 3.9kg (8.5 lbs).



CATALOG NO.

H38876-0000

H38876-0002

H38876-0003

DESCRIPTION

Economy Frigmat® Dry Ice Maker (U.S. Model)

Europe Model

Japan Model

Magic Touch™ Ice Buckets, Pans & Racks, See Pages 184-187

NEW PRODUCT!

Frigimat® Cub - Dry Ice Maker

Economical Block Dry Ice Maker for On-Demand Use

U.S. Patent 7,386,995 B2

This compact device saves the time and expense of receiving a dry ice delivery. Set-up and use is safe and simple. Can be attached to a liquid CO₂ cylinder equipped with a dip tube to produce a ready-to-use 250 to 350 gram block of dry ice in only a few minutes. Each 50lb. cylinder makes from 10-16 blocks of dry ice. Dry ice production can be viewed through the transparent polycarbonate body that secures without clamps, screws or tools ensuring easy removal of the solid block of dry ice and disconnection from the CO₂ cylinder. The lightweight body is never as cold as the dry ice, even when filled, allowing safe transport of the unit and contents when wearing appropriate gloves. A rugged nickel-plated "pigtail" connects it to the CO₂ cylinder valve which is used to regulate gas flow. Operates at very low pressure (displayed on the built-in dial gauge) and incorporates multiple pressure relief safeguards. Includes a 1.8m (6ft) nickel-plated copper connecting tube with standard CGA 320 thread coupling for easy attachment to a LCO₂ cylinder.



CATALOG NO.

F38874-0000

Frigimat® Junior Dry Ice Maker

Produces Dry Ice in Flake or Snow Form

Dry ice flakes are useful for packing around irregularly shaped items and are easily produced as needed with the Frigimat® Junior Dry Ice Maker. A brass nozzle screws onto any liquid LCO₂ cylinder equipped with a dip tube. When the cylinder valve is opened about ¼ turn, LCO₂ expands into the bag to create dry ice snow. The valve is then closed and the bag is ready to be removed and emptied. Makes .77kg (1.7 lb) of flakes per bag. The unit cone is 13cm (5") long x 5.1cm (2") diameter at end. The bag is 15W x 30cm L (6W x 12"L). Shipping weight 0.54kg (1.2 lbs). **12 per case.**



BRASS

CATALOG NO.

F38886-0000

F38886-0002

F38886-0003

F38886-0001

DESCRIPTION

Frigimat® Junior Dry Ice Maker (U.S. Model)

Europe Model

Japan Model

Extra Bags (pack of 3)