860

MOLDABLE POLYMER GASKETING

Description

Chesterton® 860 Moldable Polymer Gasketing is a solid flexible gasketing material which fills in surface irregularities, stops leaks and never sticks to surfaces after curing.

It is the one product to use to handle almost every gasketing application. MPG is easily formed into simple or complex shapes eliminating the necessity to inventory precut gaskets or sheets of gasketing. Waste, often 50% with conventional gasket sheeting material, is eliminated with this unique polymeric material.

Using MPG, gaskets as thin as 0,13 mm (5 mil) can be formed. This gives the best fit between flanges and provides far superior pressure and chemical resistance. Because it forms a very quick seal, 860 MPG will hold up to 1 kg/cm^2 (15 psi) as soon as equipment is assembled and up to 7 kg/cm^2 (100 psi) in minutes. It can be used in applications ranging in temperature from –51°C to 260°C (–60°F to 500°F).

Disassembly of equipment is always easy when sealed with a gasket made of 860 Moldable Polymer Gasketing. It will never bond mating surfaces together nor stick to the surface to which it is applied. After disassembly, just peel the gasket off. No scraping is ever necessary.

Cured 860 Moldable Polymer Gasketing conforms to paragraphs 175.300 and 177.2600 of 21 CFR of the FDA (United States Food & Drug Administration) and meets NSF requirements for incidental food contact.

Composition

Chesterton 860 Moldable Polymer Gasketing is a high purity synthetic elastomer engineered to provide the optimum balance of flexibility, chemical resistance and temperature range. It is applied as a smooth white thixotropic paste which will hang on a vertical or overhead surface.

MPG was designed as a gasketing material, not a sealant. A sealant makes a very poor gasketing material. The silicone resins used in them are very slow to cure, taking from 24 to 100 hours when sealed between flanges. These products usually adhere to surfaces making flange faces difficult to separate and the leftover sealant nearly impossible to remove except with very strong solvents.

The reaction process for most of these materials utilizes the moisture in air in the curing process. Acetic acid is formed as a by product of this reaction and produces malodorous and corrosive fumes. The acid is especially a problem on aluminum, copper and brass. The reactivity of the product with air also causes most products to cure in the tip and cartridge once opened.

Because 860 Moldable Polymer Gasketing utilizes an entirely different elastomer and curing process, it does not stick to surfaces and remains stable even after the container is opened. Chesterton 860 Moldable Polymer Gasketing can be the one economical solution to all plant gasketing needs.

Typical Physical Properties

Cure Time* at 25°C (77°F)		Gel time 3-4 hours (Full cure 24 hours)
Hydraulic Pressure (Max)		211 kg/cm^2 (3000 psi)
Steam Pressure at 170°C (338°F)		6,8 kg/cm^2 (100 psi)
Coverage per 400 grams 3 mm (1/8 inch) bead 6 mm (1/4 inch) bead		 3289 linear cm (108 linear feet) 822 linear cm (27 linear feet)
Temperature Limit (continuous) (intermittent)		–51°C (-60°F) to +260°C (+500°F) to +320°C (600°F)
Chemical Resistance		See chart on reverse side of page
Tensile Strength at 25°C (77°F)		25 kg/cm^2 (360 psi)
Elongation, % at yield		180%
Linear Shrinkage, 3 days at 25°C (77°F)		 0.4 - 0.6%
Hardness, Shore A		50
Volume Resistivity	25°C ohm/cm	2.0 x 10^{15}
Dielectric Constant	25°C 1 KHz	4.0
Dissipation Factor	25°C 1 KHz	0.027
Dielectric Strength	volts/mil	500

* After application of curing agent. Cures faster at high temperatures.

Applications

Solid gap filler and gasket replacement anywhere a tight seal is needed. Apply to flange surfaces and fittings including thread fittings, hose clamps and O-ring fittings. Fills in voids, scratches, gouges and distortions up to 6 mm (1/4 inch) deep.

Features

- Never sticks to surfaces
- Saves labor – no more gasket cutting
- Remains elastic – no aging
- Forms ultra-thin gasket
- Fills gaps up to 6 mm (1/4 inch) deep
- NSF P1 - Registration number 134017 and 134018

Benefits

- Economical; costs less than compressed sheet gasket
- No strong solvents needed for removal
- Won't harden in tip
- Can withstand higher pressures
- Excellent for irregular surfaces

Directions

Use 2 mm (1/16 inch) bead for 25 mm (1 inch) wide flange, 3 mm (1/8 inch) bead for 50 mm (2 inch) wide flange. Use larger beads for rough flanges.

Flanges

1. Remove old gasketing material and clean surfaces to be sealed.
2. Apply Chesterton® 860 Moldable Polymer Gasketing to one flange face. Make a continuous bead around inside of bolt holes and flange irregularities
3. Spray 860 Curing Agent on opposite mating flange.
4. Spray 860 Curing Agent on surface of 860 Polymer.
5. Assemble equipment immediately after spraying curing agent on polymer.

Thread Fittings

1. Clean threads thoroughly.
2. Apply 860 across male threads and spread evenly.
3. Spray 860 Curing Agent on female threads.
4. Spray 860 Curing Agent over polymer on male threads.
5. Assemble fitting immediately.

Safety

Before using product please review the Material Safety Data Sheet or the appropriate safety sheet for your area.

Chemical Resistance

	Resistance	Temperature °C	Temperature °F
Acetone	Resistant	25	77
Benzene	Fair	25	77
Ethyl Alcohol	Resistant	25	77
Gasoline	Poor	25	77
Hydrochloric Acid, 36%	Resistant	25	77
Mineral Oil	Resistant Fair	25 121	77 250
Nitric Acid, 10% 70%	Resistant Fair	25 25	77 77
Phosphoric Acid, 30%	Resistant	25	77
Perchloroethylene	Resistant	25	77
Potassium Hydroxide-Concentrated	Fair	149	300
Sodium Hydroxide, 15%	Resistant	25	77
Steam to 7kg/cm^2 (100 psi)	Resistant	170	338
Sulfuric Acid, 10% 95%	Resistant Poor	25 25	77 77
Toluene	Fair	25	77
Xylene	Fair	25	77

Contact your local specialist for more extensive chemical resistance data

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