

Thermosil 3002

Primerless Thixotropic Silicone Sealant

Technical Data and Instructions



Product Description

Thermosil 3002 is a thixotropic, two-part (A/B), room temperature vulcanizing silicone sealant (RTV). It bonds securely to metals and composites, without the need for primer, and offers rapid curing in just hours—or even minutes with applied heat—making it ideal for fast repairs using a heat gun, or manufacturing applications using industrial ovens.

Thermosil 3002 is a flow-resistant dimethyl-polysiloxane silicone rubber. It can withstand operating temperatures from -65°F to 400°F (-54°C to 204°C) and does not emit hazardous or corrosive by-products.

Thermosil 3002 meets the requirements of Pratt & Whitney specification PWA 36713-2. It is available in pre-measured void-free A/B component injection cartridges. **Please read the Safety Data Sheet before use.**

Important Application Information

Component Matching

Thermosil 3002 is supplied as a two-part (A/B), precision metered, component injection cartridge kit. The product should be mixed using the specific Part A and Part B components supplied with the kit. Using a different Part A or Part B component may affect product properties.

Curing Inhibition

Thermosil 3002 is a platinum-catalyzed addition reaction silicone rubber. The curing mechanism is sensitive to inhibition by amines, sulfur, or tin-catalyzed rubbers.

Mixing, Containers, and Tools

Thermosil 3002 cartridges are designed to be mixed by automated mixing equipment specific to that purpose. The following materials/tools are approved for mixing and handling:

- Stainless steel, glass, or high-density polyethylene (HDPE) containers
- Stainless steel or HDPE hand tools
- Stainless steel mixing equipment

All tools and equipment must be thoroughly cleaned after use. Clean with mineral spirits, followed by a solvent rinse.

Storage, Shelf Life, and Recertification

Thermosil 3002 has a shelf-life of six (6) months from the date of shipment when stored in its original, unopened containers at temperatures not exceeding 90°F (32°C). FMI Chemical offers free recertification of its products where permitted. Please contact FMI Chemical for details.

Thermosil 3002 A/B Technical Data*

UNCURED PROPERTIES	Part A	Part B
Consistency	Thixotropic	N/A
Color	Gray	Clear
Parts A and B mixed at 75°F (24°C) at 50% relative humidity		
Mix ratio A:B (Parts by weight)	10:1	
Flow (Inches after 15 minutes)	0.05 in.	
Working Life	> 1.5 hours	
Extrusion Rate	> 500 g/min.	
CURED PROPERTIES	Cured 2 hours at 250°F (121°C) in mold	
Color	Gray	
Specific Gravity	1.15 - 1.17	
Tensile Strength	850 - 950 psi	
Elongation	300% minimum	
Lap Shear Strength	450 - 500 psi	
Cohesive Failure	100%	
Hardness	45 Shore A	

* Typical manufactured properties should not be used as specifications.

Mixing and Tooling Instructions

Automated Mixing

Thread the Part B dasher rod into the Part A cartridge. Use a ramrod to inject Part B into the middle of the cartridge containing Part A. Install the cartridge on an automatic mixer and set the mixer's stroke length so that the open spoke mixer will contact the plunger without displacing it. Mix for 2 1/2 minutes. When mixing is complete, unthread the dasher rod and install the cartridge in a pneumatic or mechanical dispensing gun.

Tooling

Tool Thermosil 3002 with acetone, methyl ethyl ketone (MEK), or isopropyl alcohol (IPA).

Have a question? Please contact us at:

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