

# Thermosil 3002

## All-Purpose Silicone Sealant

Thermosil 3002 is a thixotropic, 2-part (A/B), room temperature vulcanizing, all-purpose silicone sealant (RTV-2). 3002 bonds securely to a wide range of clean metals and composites without the need for a primer (a primer can be used if required).\* Thermosil 3002 offers rapid curing in just hours, or even minutes with applied heat. It is ideal for manufacturing applications using industrial ovens, or fast repairs using a heat gun.

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 Pratt & Whitney specification PWA 36713-2. It is available in pre-measured void-free A/B injection cartridges.



\* See *Applying The Product*, below.

## Application Information

### 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 and Handling

Thermosil 3002 cartridges are designed to be mixed by automated mixing equipment specific to that purpose.

The following containers and tools are approved for handling this material:

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

Clean all tools and equipment thoroughly after use. Clean with mineral spirits, followed by a solvent rinse.

### Applying the Product

Thermosil 3002 bonds to a wide range of clean materials without the need for a primer. Clean and prepare surfaces with a solvent wash, degreaser, or abrasion.

**Application Note:** A primer can be used if indicated for the application. Specific surface preparation may be required for optimal bonding performance on some plastics or composite materials. Please contact FMI Chemical if you have questions about a particular application of this product.

### Component Matching

Thermosil 3002 is supplied as a 2-part (A/B), precision metered, injection cartridge kit. Mix the product 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.

### Automated Mixing

The following are general mixing instructions using an industry-standard automated mixer. FMI Chemical recommends the use of automated mixing equipment for Thermosil 3002 A/B injection cartridges. Thread the Part B dasher rod into the spoker at the top of the Part A cartridge. If applicable, use a ramrod to inject Part B into the middle of Part A. Install the joined cartridge and dasher rod unit into the mixer and adjust the mixer's settings for the correct cartridge size. Mix the material for 70 strokes, or 2.5 minutes (00:02:30) at 90 rpm. When mixing is complete, pull the spoker to the top of the cartridge, unthread the dasher rod, and install the cartridge in a pneumatic or mechanical dispensing gun. For more information about automated mixing procedures, mixing various cartridge sizes, or alternative mixing methods, please contact FMI Chemical.

## Tooling

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

## 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 recertification of its products where permitted. Please contact FMI Chemical for details.

**PLEASE READ THE SAFETY DATA SHEET BEFORE USING THIS PRODUCT.**

## Technical Data

Thermosil 3002 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	> 400 g/min.	
Thermosil 3002 Cured Properties	Cured 2 hours at 250°F (121°C) in mold	
Color	Gray	
Specific Gravity	1.16	
Tensile Strength	1000 psi	
Elongation	500%	
Lap Shear Strength	400 psi	
Cohesive Failure	100%	
Hardness	45 Shore A	

*Typical manufactured properties should not be used as specifications.*



Have a question? Please call (+1) 860-243-3222

FMI Chemical, Inc., 4 Northwood Drive, Bloomfield, CT 06002 USA | [fmichemical.com](http://fmichemical.com)

ISO 9001:2015 and AS9100D certified | Nadcap™ accredited (nonmetallic testing) | ANAB® accredited per ISO/IEC 17025:20

