

Hercules Industries High Temperature Silicone



■ Product Description:

Hercules High Temperature Silicone Sealant is a high quality elastic sealant that cures to form a vibration resistant, low modulus, water resistant seal. Hercules High Temperature Silicone has been specially formulated to resist high temperatures while adhering to a wide range of materials. This product has a tack-free time of 20 minutes or less and a cure time of 24 hours for 1/8" cross sections.

■ Colors and Packaging:

Size	10.1 fl.oz.
Package	Cartridge
Color	Red
Part No.	HERC-24-12-003

■ Features:

- Acetoxycure
- Remains permanently elastic after curing
- High modulus
- -85°F-500°F (-65°C-260°C) Continuous exposure temperature range
- Up to 600°F (315°C) intermittent maximum
- Excellent adhesion on metal, glass and glazed substrates

■ Applications:

- Sealing and encapsulating heating elements
- Gaskets in pumps and motors
- Aerospace gasketing
- All sealant applications which require high temperature resistance

■ Compatible Surfaces:

- Metal
- Glass
- Glazed surfaces
- *Not suitable for Polyethylene or Polypropylene*

■ Application Notes:

- Always perform preliminary compatibility test
- Porous surfaces must be primed
- Ensure application surface is clean, dry, free of dust and grease

■ Recommended Joint Dimensions:

Minimum Width: 3/16" (5 mm)
Maximum Width: 1-1/8" (30 mm)
Minimum Depth: 3/16" (5 mm)
Recommendation: width = 2 × depth

■ Warranty and Shelf Life:

Hercules Industries warrants that product shall meet its specifications and be free of defects in workmanship. Unopened product has a 12 month shelf life when stored in a cool, dry place with temperatures between 40°F and 90°F (4°C and 32°C). Do not expose to frost.

Hercules Industries High Temperature Silicone



Health and Safety Recommendations:

- Apply standard industrial hygiene
- In case of emergency, contact INFOTRAC at 1.800.535.5053
- *Please consult product label and MSDS for additional safety information.*

Remarks:

Due to the acetic character of Hercules High Temperature Silicone Sealant, some metals such as copper and lead may stain when in contact with this product.

Do not use this material on natural stone or bituminous substrates.

Designed to meet the requirements of MIL-A-46106A, Amend.2, Type 1.

Physical Properties:

Base	Silicone
Consistency	Paste
Extrusion rate (1/8" / 3.2mm) orifice, 90 psi air pressure	335 g/minute
Flow Rate (sag or slump)	Nil
Theoretical Yield (@ joint size)	99LF @ 1/8" x 1/8" 33LM @ 3mm x 3mm
Curing System	Acetoxy Cure
Tack-Free Time (77°F/50% R.H.)	17 minutes
Cure Time (77°F/50% R.H.)	24 hrs
Hardness (ASTM C661)	26 Shore A
Specific Gravity	1.01
Application Temperature	-20°F to 122°F (-29°C to 50°C)
Temperature Resistance	-85°F to 500°F (-65°C to 260°C) 600°F intermittent
Thermal Conductivity (ASTM D2137 A)	0.45 × 10 ⁻³ cal/(cm·°C·sec)
Elongation at Break (ASTM D412 Die C)	600%
Maximum Tension (ASTM D412 Die C)	350 psi (2400 kPa)
Brittle Point (ASTM D746)	-80°F (-62°C)
VOC	32g/liter 3.14% by weight

Shipping Specifications:

Size	Units/Case	Case Weight	Dimensions (L" × W" × H")		Cases/Pallet	Pallet Weight
			Case	Pallet		
10.1 fl.oz.	12	10 lbs	8 × 6 × 9	48 × 40 × 48	144	1440 lbs