

CSL523 | High Heat High Strength Sealant



Benefits

- Unaffected by extreme temperatures
- High strength
- Oil and chemical resistance
- Resists moisture, vibration, mechanical and thermal shock



www.cslsilicones.com

High heat form-in-place gasketing for industrial and transportation applications

Silicones are fundamental to many of the components used in challenging industrial and transportation applications such as aviation and aerospace which, by their nature place extreme demands on materials.

Because silicones can withstand astonishing stress and temperature extremes they are used in a variety of aspects of aircraft and spacecraft assembly and maintenance.

For example, high heat silicone sealants are used to seal and protect the following from the elements: doors, windows, wings, fuel tanks, hydraulic switches, overhead bins, wing edges, leading gear electrical devices, vent ducts, engine gaskets, electrical wires and even the black box.

Why do silicones excel in industrial and transportation applications?

Silicone elastomers are formulated to meet the extreme needs and physical properties required for high performance gaskets. Silicone sealants:

- are non-corrosive
- have low toxicity
- have excellent thermal stability
- possess enhanced chemical and oil resistance
- are resistant to humidity, moisture and contaminants
- absorb mechanical and thermal shock and vibration
- have excellent electrical properties
- resist ultra-violet rays, ozone and weathering
- remain permanently flexible in extreme conditions
- useful in a variety of application methods

CSL523 100% Silicone High Heat High Strength Sealant

CSL523 is a one-part, moisture curing RTV (Room Temperature Vulcanizing) silicone sealant that cures to a tough rubber gasket that can be used in corrosion-sensitive applications with no adverse effects.

CSL523 is particularly effective for aviation and aeronautical applications requiring high strength.

CSL523 is designed to maintain maximum performance and remain permanently flexible in a continuous temperature environment of 300°C (572°F).

CSL523 has superior resistance to oils used in mechanical and automotive systems.

... CSL523 Product Characteristics ↘

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Typical Applications

- Aviation and aerospace sealing and gasketing
- Variety of automotive sealing and gasketing
- Photovoltaics and solar panel assembly

Features

- Extreme temperature performance
- High strength
- Superior oil resistance
- Non-corrosive
- Superior adhesion and flexibility in extreme environments
- Excellent hydrophobicity
- Easy application



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CSL523 Intended Uses

CSL523 is used in a wide variety of high temperature automotive and aeronautical environments for sealing and form-in-place gasketing where high strength and superior oil resistance is required.

CSL523 is specifically formulated to be used as a form-in-place gasket where operating temperatures up to 300°C (572°F) are maintained.

CSL523 Typical Properties[‡]

Cure System	One part RTV/Oxime
Extrusion Rate ¹ [g/min]	250
Cure Time at Standard Conditions ² [hours]	24
Tensile Strength ³ ASTM D412 [psi]	420
Hardness ³ ASTM D2240 [points]	42 Shore A
Elongation at Break ³ ASTM D412	330%
Tear Resistance ³ (ASTM D624, Die B) [ppi]	39

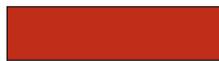
[‡]Data is subject to change without notice. These values are not intended for use in preparing specifications. For more complete information, please refer to the current Technical Data Sheets for these products.

NOTES

- 1 Minimum extrusion rate @ 25°C (90psi, 3.2mm orifice)
- 2 Standard Conditions are 25°C (77°F) and 50% relative humidity
- 3 Cured for 7 days at Standard Conditions²

CSL523 Availability

Colors[¥]



Hi Temp Red 013

[¥]The color chips are only representations of actual colors and should not be considered an exact color match to finished product.

CSL523 is available in red.

Packaging

CSL523 is available in in 300mL (10.2 fl. oz.) cartridges, 19L (5 US gallon) pails and 189L (50 US gallon) drums.

Shelf Life and Storage

CSL523 has a shelf life of twelve months from date of manufacture when stored in the original unopened container in dry, shaded conditions, away from sources of heat or ignition, and stored at or below 90°F (32°C).