

# CSL-533 Technical Data Sheet

## Hi-Temp Non-Corrosive Gasket Material

### 1. PRODUCT NAME

CSL-533 Hi-Temp Non-Corrosive Gasket Material

### 2. FEATURES

- Neutral cure formulation
- Unaffected by extreme temperatures from -60°C to 315°C (-76°F to 600°F)
- Gasket will remain permanently flexible
- Provides excellent resistance to vibration and shock

### 3. PRODUCT DESCRIPTION

CSL-533 is a one-part, moisture curing, room temperature vulcanizing red silicone rubber, that cures to form a durable yet flexible and resilient gasket. It has been specifically formulated to provide outstanding adhesive and sealant properties where operating temperatures can reach 315°C (600°F). It also has superior resistance to oils used in mechanical and automotive systems.

The primary use for CSL-533 is formed-in-place gaskets in high temperature applications to replace conventional cork gaskets. Such uses include:

### Typical Properties

These values are not intended for use in preparing specifications

<b>Uncured</b>	
Type	100% silicone, one-part RTV
Appearance	Smooth, non-slump, red paste
Specific Gravity	1.15
Slump/Sag	Nil
Extrusion Rate (3.2mm (1/8") orifice, 90psi)	100 g/min.
Application Temperature Range	-18°C to 50°C (0°F to 120°F)
Cure System	Neutral, Moisture Cure
Skin-Over Time at Standard Conditions*	10 - 15 min.
Cure Time at Standard Conditions*	24 hr.
<b>Cured</b>	
At Standard Conditions* for 7 Days	
Durometer Hardness (ASTM D2240, Shore A)	25 points
Tensile Strength (ASTM D412)	12.3 kg/cm <sup>2</sup> (175 psi)
Elongation at Break (ASTM D412)	400%
Tear Resistance (ASTM D624, Die B)	3.2 kN/m (18 ppi)
Shrink Factor	Nil

\*Standard Conditions are 25°C (77°F) and 50% relative humidity

### Automotive

- Valve covers
- Axle housings
- Water and oil pump seals
- Thermostat housings
- Timing chain covers
- Fuel pumps to blocks
- Solenoid covers

### Industrial

- Pump and compressor gaskets
- Appliance door gaskets
- Humidifier gaskets
- Air conditioner gaskets
- Repairing torn silicone rubber sheets
- Ductwork gaskets
- Dust collection components
- Wire and cable insulation

### 4. APPLICATION

CSL-533 is ready-to-use and requires no mixing or additives. The cure mechanism begins as soon as the sealant comes in contact with air. At conditions of 25°C (77°F) and 50% relative humidity, the sealant will

skin-over in 10 minutes and fully cure within 24 hours, 3.2mm (1/8") bead. For gasket applications, apply an even bead, to one surface, making certain to surround all bolt holes. Press parts together and torque normally.

Provided that all the bonding surfaces are clean and dry, CSL-533 has excellent unprimed adhesion to most substrates. If there is any doubt about contamination, surfaces should be solvent-wiped with oil-free solvents such as xylol, toluol, naphtha or non-flammable chlorinated solvents. Do not solvent wipe with oil-based solvents such as Varsol.

**5. STORAGE**

CSL-533 when stored in original unopened container at or below 32°C(90°F) has a one year shelf life from the date of manufacture. Most products however, will last longer if stored in cool dry conditions.

**6. PACKAGING**

CSL-533 is available in 80ml (2.7 fl oz) tubes, 300ml (10.2 fl oz) caulking cartridges, 19L (5 US gallon) pails and 189L (50 US gallon) drums.

**7. SAFETY PRECAUTIONS**

CSL-533 uses a neutral cure system, so no acetic acid or objectionable by-products are evolved during cure. Adequate ventilation should be provided with extensive use of this sealant. On direct contact, uncured sealant may irritate eyes. Flush well with water and call a physician. Avoid prolonged contact with skin. See Material Safety Data Sheet available on this product. **KEEP OUT OF REACH OF CHILDREN.**

**8. WARRANTY**

CSL Silicones Inc. warrants that its products will meet its specifications. CSL shall in no event be liable for incidental or consequential damages. Except as expressly stipulated, CSL's liability, expressed or implied, is limited to the stated selling price of any defective goods.

Data is subject to change without notice and it is therefore recommended that this information not be used for specification writing. For additional information on specific applications, contact the manufacturer.

**Oil Resistance Data  
Typical Properties after Immersion in Oils for 70 Hours**

<b>Property</b>	<b>Engine Oil* (5W30)</b>	<b>Transmission Fluid** (Esso Dextron II)</b>	<b>Multigrade Motor Oil** (Shell Rotella 15W40)</b>
Durometer Hardness (ASTM D2240, Shore A)	13 points	22 points	25 points
Tensile Strength (ASTM D412)	13.4 kg/cm <sup>2</sup> (190 psi)	17.5 kg/cm <sup>2</sup> (250 psi)	18.9 kg/cm <sup>2</sup> (268 psi)
Elongation at Break (ASTM D412)	590%	445%	400%

\* At 150°C (302°F)  
\*\* At 100°C (212°F)

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