

# CSL-535 Technical Data Sheet

## Oil Resistant Silicone Sealant/Adhesive

### 1. PRODUCT NAME

CSL-535 Oil Resistant Silicone Sealant/Adhesive

### 2. FEATURES

- Neutral cure formulation
- Recognized under the Components Program of the Underwriters Laboratories Inc.®
- Excellent adhesion to glass, metal, porcelain, ceramic, wood, most plastics, etc.

### 3. PRODUCT DESCRIPTION

CSL-535 Neutral Cure Silicone Sealant/Adhesive is a one-part, non-slump, moisture curing RTV (room temperature vulcanizing) which cures to form a tough, high modulus rubber with long-term flexibility and durability. The neutral curing mechanism is ideally suited for use in confined areas since no objectionable odors are evolved. The non-slump characteristics of CSL-535 allow application to vertical or horizontal joints without flowing or sagging. CSL-535 has excellent resistance to weathering including ozone, ultra-violet radiation, freeze-thaw and

airborne chemicals. After cure, the wide heat stability range of CSL 535 is from -60°C to 200°C (-70°F to 390°F) and the sealant can be applied to surface temperatures from -18°C to 50°C (0°F to 120°F).

CSL-535 can be used as a durable, general purpose sealant/adhesive in a wide range of industrial applications. As examples, CSL-535 can be used for sealing LNG, LPG and NG pipeline flanges and valves. Unprimed adhesion to a wide range of substrates is available with the use of CSL-535. For example, CSL-535 adheres to unprimed chrome and stainless steel.

As a formed in place gasket, CSL-535 exhibits low swell, low compression set and good oil resistance. These characteristics impart an unusual balance of properties to CSL-535 to prevent leakage in harsh environments such as engines, transmissions, water pumps, rear axles and oil pans.

### 4. APPLICATION

CSL-535 is ready to use and requires no mixing or additives. Curing begins as soon

### 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 paste
Specific Gravity	1.03
Slump/Sag	Nil
Extrusion Rate (3.2mm (1/8") orifice, 90psi)	100 g/min.
Application Temperature Range	-60°C to 200°C (-70°F to 390°F)
Cure System	Neutral, Moisture Cure
Skin-Over Time at Standard Conditions*	10 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)	14.0 kg/cm <sup>2</sup> (200 psi)
Elongation at Break (ASTM D412)	400%
Tear Resistance (ASTM D624, Die B)	3.5 kN/m (20 ppi)
Shrink Factor	Nil

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

as the sealant is exposed to air. At conditions of 25°C (77°F) and 50% relative humidity, the sealant will 'skin' in 10 minutes and fully cure in 24 hours (1/8" bead). Higher humidity accelerates cure. Tooling should be done before 'skinning' takes place. In applications where partial or total confinement of the sealant is prevalent, the time required for proper cure is generally lengthened by the degree of confinement.

CSL-535 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 naphtha. Do not use oil based solvents such as Varsol. Priming for CSL-535 is normally not required for application to most substrates. Unprimed adhesion can be readily tested by applying a small trial bead and allowing 7 days for maximum adhesion to occur.

#### 5. COLORS

CSL-535 is supplied in clear, white and grey. Other colors are available upon request.

#### 6. STORAGE

CSL-535 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.

#### 7. PACKAGING

CSL-535 is available in 300ml (10.2 fl oz) caulking cartridges, 19L (5 US gallon) pails and 189L (50 US gallon) drums.

#### 8. SAFETY PRECAUTIONS

CSL-535 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.**

#### 9. UL® CLASSIFICATION

CSL-535 is recognized under the Components Program of Underwriters Laboratories Inc.®

#### 10. 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

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

Property	Engine Oil (10W30, Shell X-100)	Transmission Fluid (Esso Dextron II)	Diesel Engine Oil (Essolube XD-3)
Durometer Hardness (ASTM D2240, Shore A)	15 points	17 points	15 points
Tensile Strength (ASTM D412)	10.5 kg/cm <sup>2</sup> (150 psi)	12.5 kg/cm <sup>2</sup> (180 psi)	10.5 kg/cm <sup>2</sup> (150 psi)
Elongation at Break (ASTM D412)	400%	450%	450%

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