

# **Silicone Conformal Coating - Clear**

# **Technical Data Sheet**



## TYPICAL USES

- Protects circuitry in severe service environments
- Maintains a low-stress environment for components and connections
- · Protects consumer electronics from everyday temperature and humidity
- Automotive under-hood applications
- Military or industrial applications

## PRODUCT DESCRIPTION

 $\textbf{CSL 541} \ \text{is a one-part, moisture curing, room-temperature vulcanizing (RTV), electronic grade 100\% silicone conformal coating. } \\$ 

#### **APPLICABLE STANDARDS**

Recognized under the Components Program of Underwriters Laboratories Inc. UL File No. E109726: Category QMFZ2.E109726 Plastic Component

CSL 541 is EcoLogo Certified

#### PRODUCT CHARACTERISTICS AND PRACTICAL INFORMATION

Туре	100% silicone, one-part RTV	
Appearance	Smooth, pourable liquid	
Temperature Range‡		
Application Temperature Range	Ambient to 50°C (120°F)	
Useable Temperature Range	-60°C a 200°C (-76°F a 392°F)	
Drying Time*		
Skin-Over Time	20 minutes	
Tack-free Time	40 minutes	
Cure Time	1 hour (10 mil film)	
Full Physical Characteristics	7 days	

#### PHYSICAL PROPERTIES

(Typical properties - values not to be used as specifications)

Uncured	
Specific Gravity	0.98
Viscocity	4,000 ± 1,000 cP
Cure System	Neutral (Oxime), Moisture Cure
Cured at standard conditions* for 7 days	
Dielectric Strength (ASTM D149)	720.1 V/mil (283.5 kV/cm)
Volume Resistivity (ASTM D257)	>1.4 x 10 <sup>12</sup> ohms-cm
Dissipation Factor (ASTM D150)	at 100 Hz: 1.017 at 100 kHz: 0.719
Dielectric Constant (ASTM D150)	at 100 Hz: 3.75 at 100 kHz: 3.85

‡Please consult CSL for suitability for application at lower temperatures

# COLORS

CSL 541 is available in Clear.

# **SURFACE PREPARATION & CLEANLINESS**

All surfaces should be clean and dry and free of dust, dirt, and grease.

# APPLICATION

**CSL 541** coating can be applied by spray, flow and brush techniques. CSL541 can be removed by soaking in solvent such as toluene, xylene or chlorinated solvents followed by brushing and washing.

# SAFETY PRECAUTIONS

**CSL 541** uses a neutral cure system, so no acetic acid or objectionable byproducts are evolved during cure. Adequate ventilation should be provided with extensive use of this sealant.

On direct contact, the uncured sealant may irritate eyes. Flush well with water and call a physician. Avoid prolonged contact with the skin. See the Safety Data Sheet available on this product.

This product is intended for use only by professional applicators in accordance with the

advice given in this document, the Safety Data Sheet (SDS) and the container(s), and should not be used without reference to the SDS that CSL Silicones Inc. has provided to its customers. **KEEP OUT OF REACH OF CHILDREN**.

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards & regulations.

If in doubt regarding the suitability of use of this product, consult CSL Silicones Inc. for further advice.

#### **STORAGE**

**CSL 541**, when stored in original, unopened container in dry, shaded conditions, away from sources of heat or ignition, and stored below 32°C (90°F), has a shelf life of 6 months from date of manufacture.

## **PACKAGING**

 $\textbf{CSL 541} \ \text{is available in 3.8 L (1 gal) cans, 18.9 L (5 US gallon) pails and 189 L (50 US gallon) drums. }$ 

#### 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.



<sup>\*</sup>At standard conditions 77oF (25oC) and 50% relative humidity.





Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this document without first obtaining written confirmation from CSL Silicones Inc. as to the suitability of the product for the intended purpose does so at his/her own risk. The information contained herein has been prepared in good faith to comply with applicable federal and provincial (state) law(s). However, no warranty of any kind is given or implied and CSL Silicones Inc. will not be responsible for any damages, losses or injuries that may result from the use of any information contained herein. While CSL endeavors to ensure all advice it gives about the product (whether in this document or otherwise) is correct, we have no control over either the quality or condition of the substrate or the many factors affecting the use and ap-plication of the product. Therefore, unless CSL specifically agrees in writing to do so, it does not accept any liability whatsoever or howsoever arising for the performance of the product, or for any consequential loss or damage arising out of the use of the product. Any warranty, if given or specific Terms & Conditions of Sale are contained in CSL's Terms & Conditions of Sale, a copy of which can be obtained upon request. The information contained herein is liable to modification from time-to-time in light of experience and CSL's policy of continuous product improvement. It is the user's responsibility to check that this document is current prior to using the product. This document must not be used for specification writing.

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