CSL® 541

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

CSL 541 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

Type	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^{12} 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
**At standard conditions 77oF (25oC) and 50% relative humidity.*

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

CSL 541 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.

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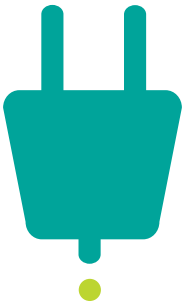

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