

Self-Leveling Electronic Grade Silicone Sealant

Technical Data Sheet

TYPICAL USES

- Potting electrical terminals
- Circuit board protection
- Electrical connections
- Waterproofing electronics
- Sealing and bonding electronics
- LED bonding and encapsulating sealant

PRODUCT DESCRIPTION

CSL 505T is a one part, moisture cure, room-temperature vulcanizing (RTV), 100% silicone electronic grade self-leveling silicone sealant.

CSL 505T does not generate acetic acid or other corrosive byproducts during cure, making it ideal for use in corrosion-sensitive electronic equipment. CSL505T resists weathering, moisture, vibration, ozone, ultra-violet rays, and temperature extremes.

PRODUCT CHARACTERISTICS AND PRACTICAL INFORMATION

Туре	100% silicone, one-part RTV
Appearance	Smooth, thick 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*	
Tooling/Skin-Over Time	15-25 minutes
Cure Time	24 hours
Full Physical Characteristics	7 days

PHYSICAL PROPERTIES

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

Uncured	
Specific Gravity	1.03
Slump / Sag	Flowable
Viscosity	20,000 ± 3,000 cP
Cure System	Neutral (Oxime), Moisture Cure
Cured at standard conditions* for 7 days	
DurometerHardness (ASTM D2240, Shore A)	33 points
Tensile Strength (ASTM D412)	250 psi (17.6 kg/cm²)
Elongation at Break (ASTM D412)	260%
Tear Resistance (ASTM D624, Die B)	18 ppi (3.2 kN/m)
Volume Resistivity (ohm-cm)	2.2x10 ¹⁵
Average Resistivity from Reports (ohm-cm)	Not Tested

‡Please consult CSL for suitability for application at lower temperatures *At standard conditions 77oF (25oC) and 50% relative humidity.

COLORS

CSL 505T is available in Grey,

For special projects, other colors are available using custom color matching at an additional charge. Please contact CSL Silicones for assistance. Terms and conditions may apply.

SURFACE PREPARATION & CLEANLINESS

All surfaces should be clean and dry, and free of dust, dirt, and grease. It is recommended that bonding surfaces be wiped with an oil-free solvent. Allow surface to dry thoroughly before applying sealant.

Priming is normally not required for applications to most substrates. Applying a small trial bead and allowing 7 days for maximum adhesion to occur can readily test unprimed adhesion.

APPLICATION

CSL 505T is ready to use and may require mixing if left for a long period of time. The cure mechanism begins as soon as the sealant is exposed to air. Uncured sealant will flow until a cured skin is formed. At conditions of 25°C (77°F) and 50% relative humidity, a bead of sealant 3mm (1/8") will skin over within 15-25 minutes and fully cure in 24 hours.

Higher humidity accelerates cure. In applications where partial or total confinement of sealant is prevalent, the time required for proper cure is generally lengthened by the degree of confinement.

In confined cure conditions, **CSL 505T** neutral cure sealant may discolor brass, copper, or other sensitive metals, and/or stress craze polycarbonate.

CSL 505T should not be applied below grade, to surfaces under continuous water immersion, to substrates that bleed oils, plasticizers or solvents (e.g. impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes), to surfaces in direct contact with food, and to surfaces that will be painted over.

SAFETY PRECAUTIONS

CSL 505T 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 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 505T, 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 15 months from date of manufacture.

PACKAGING

CSL 505T is available in 300 ml (10.2 fl. oz) cartridges, 600 ml (20.2 fl. oz.) sausages, 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.









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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