

Fine-L-Kote SR Silicone Conformal Coating

Product# 2102

Product Description

Silicone Conformal Coating is the most universal coating, offering protection for a wide variety of environments.

Features / Benefits

- UL recognized (UL746E) - file #E475454
- Thermal resistance - 392°F (200°C)
- Dielectric strength - 1100 volts/mil
- Moisture resistant
- Chemically resistant
- Vibration resistant & flexible
- IPC-CC-830B & MIL-I-46058C qualified

Usage Instructions

Surface to be sprayed should be thoroughly cleaned with solvent such as **Flux Remover G3®** (1631). Surface must be completely dry before application of coating. Shake can well. Hold the board to be coated in a horizontal position and spray from top to bottom, holding the can four to six inches from surface. First, apply a light topical coating, then, after board has been fully coated, immediately apply a second heavier coat. Allow material to flow around the components. After application, invert can and spray until no liquid is expelled. Coating will be tack free in approximately 1 hour; however, full cure requires 72 hours depending upon humidity. Coated boards can be reworked by applying soldering iron directly to coating. Coated boards can be reworked by applying soldering iron directly to coating, or complete removal can be achieved in 1 to 3 hours by using Conformal Coating Remover (2510). Removal time depends upon temperature, thickness of coating, and application.

Application method considerations:

Dip – High volume method to fully coat boards. Thickness of final coating is controlled by viscosity and withdrawal speed from the pot. Selective spray system – Computer controlled selective spray systems, eliminate the need for masking. Higher viscosity than full coverage sprayer is generally needed (70-200 cps) to create precise edge definition and prevent splattering.

Manual Application – Aerosol and brushing are generally used for small production runs, rework and repair. If using for rework, the aerosol needs to be compatible with the original coating.



Typical Product Data and Physical Properties

Physical state:	Liquid
Odor:	Characteristic odor
Percent volatile:	86 at 68°F (20°C)
Boiling point:	134°F (79°C)
Flashpoint and method:	10°F (-12.2°C)
Solubility in water:	Insoluble
Specific gravity:	0.830 (water=1)
VOC:	481 g/L
Shelf life:	1 year

Chemical Composition

Chemical Name	CAS#
Acetone	67-64-1
Hexane	110-54-3
1-(2-Methoxy-Methyl-Ethoxy)-2-Propanol Acetate	88917-22-0
Dimethyl methylphenylmethoxy siloxane	68952-93-2
Methyltrimethoxysilane	1185-55-3
Benzene-methyl, (Toluene)	108-88-3
Propane (aerosol only)	74-98-6

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Coating Properties

Product Benefits	Moisture & Vibration Resistant
Selective Spray System	acceptable
Atomized Spray System	acceptable
Dip	excellent
Aerosol Available	YES
Thermal Resistant	excellent
Moisture /Fungus Resistant	excellent
Chemical Resistant	excellent
Vibration Resistant	excellent
Ease of Rework	excellent
Coverage	(1 mil dry film)
1 aerosol can	16 ft ² (1.5M ²)
1 gal. liquid	224 ft ² (20.8 M ²)
Tack Free Time (min)	60
Accelerated Cure Time/Temp	2 Step 30 Min.@ 32°C 45 Min.@ 93°C
Ambient Cure Time	72 Hrs.
Mil-I-46058C / IPC-CC-830 Qualified	YES
UL 94 Rated	V0
Solids Content (% by weight)	Aerosol 11% Bulk 14%
Viscosity (centipoise)	Bulk 4-10
UV Indicator	YES
Operating Temp Range	-65° to 200° C
Dielectric Strength	1 kV/Mil
Dielectric Constant	2.66
Insulation Resistance (ohms)	6.87 x 10 ¹⁵
VOC	Aerosol 46% Bulk 58%

Environmental Policy

Techspray® is committed to developing products to ensure a safer and cleaner environment. We will continue to meet and sustain the regulations of all federal, state and local government agencies.

Resources

Techspray® products are supported by a global sales, technical and customer services resources.

For additional technical information on this product or other Techspray® products in the United States, call the technical sales department at 800-858-4043, email tsales@techspray.com or visit our web site at: www.techspray.com.

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Packaging and Availability

2102-12S	12 oz. aerosol
2102-P	1 pint liquid
2102-G	1 gallon liquid
2102-5G	5 gallon liquid