



# Fine-L-Kote™ SR

## Silicone Conformal Coating

### 2102

#### Introduction

A type SR silicone resin conformal coating that has excellent moisture and fungus resistance properties and is UL recognized (UL File Number E95150). Material flexibility allows for vibration, movement, and rapid changes in temperature. Fine-L-Kote™ SR is a durable coating that offers chemical resistance and is recommended for harsh environments. Contains Opti/Scan™ to allow for black light inspection. Coated boards can be reworked by applying soldering iron directly to coating. Coated boards can be stripped using Trace Technologies™ Conformal Coating Remover (2510-N, 2510-P).

#### Features / Benefits

- Moisture, Thermal and Chemical Resistant
- UL Recognized
- Recommended for Harsh Environments
- Flexible
- Contains Opti/Scan™

#### Chemical Components

|  |  |
|--|--|
| Toluene.....(108-88-3)                                   | 4-5% - Aerosol<br>7-8% - Bulk<br>28-30% - HV |
| Methyltrimethylsilane.....(1185-55-3)                    | <1%  |
| Dimethylmethylphenylmethoxysiloxane.....(68952-93-2)     | 12-15%<br>40-50% - HV                        |
| Hexane isomers   |  |
| Dipropylene Glycol Methyl Ether Acetate.....(88917-22-0) | <4% - Aerosol<br>3-6% - Bulk, HV             |
| Acetone.....(67-64-1)                                    | 20-25% - Aerosol<br>45-50% - Bulk            |
| Propane.....(74-98-6)                                    | 10-30% - Aerosol                             |
| Silicone Polymer   | 10-12%                                       |
| 2-Butanone.....(78-93-3)                                 | 7-10% - HV                                   |

|  |                        |                        |                  |
|--|------------------------|------------------------|------------------|
| Cure Type                                  | Thermal                |                        |                  |
| Meets/Exceeds IPC-CC-830 MIL-I-46058C      | SR Silicone            |                        |                  |
| Thermal Shock                              | 5                      |                        |                  |
| Dielectric Constant (@ 10 <sup>6</sup> Hz) | 2.33                   |                        |                  |
| Dielectric Strength (Volts/Mill)           | 1100 Dry               | 976 Wet                |                  |
| Volume Resistivity                         | 1x10 <sup>14</sup> Dry | 9x10 <sup>14</sup> Wet |                  |
| Moisture Resistance                        | 5                      |                        |                  |
| Resistant to Fungus                        | Yes                    |                        |                  |
| Ease of Repair                             | 5                      |                        |                  |
| Flexibility                                | 5                      |                        |                  |
| Chemical Resistance                        | 4                      |                        |                  |
| Dry Time to Touch                          | 1 Hour                 |                        |                  |
| Cure Time                                  | 72 Hours               |                        |                  |
| Accelerated Cure Time                      | 30 min. @ 90°F         | 45 min. @ 200°F        | Two Step Process |
| Removal (2510-P or 2510-N)                 | 1-5 min.               |                        |                  |
| Burn Through                               | Yes                    |                        |                  |

Ratings: 5 (Excellent), 4 (Very Good), 3 (Good), 2 (Fair), 1 (Poor)

## Typical Properties as Cured Physical Properties for 2102

|  |              |
|--|--------------|
| Operating temperature range °C                 | -65 to 200   |
| Specific Gravity @ 25°C                        | 1.11         |
| Tensile Strength @ 25°C, psi                   | 600          |
| Elongation @ 25°C percent                      | 60           |
| Durometer Hardness, Shore D, points            | 25           |
| Volume Coefficient of Thermal Expansion um/m/c | 253.6        |
| Thermal Conductivity @ 100°C Watts/mK          | 0.17         |
| Water Absorption, 100 hours @ 25°C Percent     | 0.05         |
| Viscosity (cps) Bulk / HV                      | 4-10 / 60-90 |

### 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.

### Packaging and Availability

Fine-L-Kote™ SR may be ordered in the following container sizes:

|          |                    |
|----------|--------------------|
| 2102-12S | 12 Ounce Aerosol   |
| 2102-P   | 1 Pint in Glass    |
| 2102-G   | 1 Gallon in Metal  |
| 2102-GHV | 1 Gallon in Metal  |
| 2102-5G  | 5 Gallons in Metal |

### 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](mailto:tsales@techspray.com) or visit our web site at: [www.techspray.com](http://www.techspray.com).

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Countries Outside US  
Call to locate a distributor  
in your country.

Important Notice to Purchaser/User: The information in this publication is based on tests that we believe are reliable. The results may vary due to differences in tests type and conditions. We recommend that each user evaluate the product to determine its suitability for the intended application. Conditions of use are outside our control and vary widely. Techspray's only obligation and your only solution is replacement of product that is shown to be defective when you receive it. In no case will Techspray® be liable for any special, incidental, or consequential damages based on breach of warranty, negligence or any other theory.



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#### Aerosol MSDS

[English](#)  
[French](#)  
[German](#)  
[Italian](#)  
[Spanish](#)

#### Bulk MSDS

[English](#)  
[French](#)  
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[Italian](#)  
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#### HV (High Viscosity) MSDS

[English](#)  
[French](#)  
[German](#)  
[Italian](#)  
[Spanish](#)

#### Pint MSDS

[English](#)  
[French](#)  
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## FINE-L-KOTE™ COATING SELECTION CHART

| Fine-L-Kote™ Part Number                   | 2102  | 2103   | 2104   | 2106                                |
|--|---|--|--|-------------------------------------|
| Cure Type                                  | Thermal   | Thermal  | Thermal  | Thermal                             |
| Meets / Exceeds IPC-CC-830 MIL-I-46058C    | SR Silicone   | AR Acrylic   | UR Urethane  | SR Silicone                         |
| Thermal Shock                              | 5   | 2  | 3  | 5                                   |
| Dielectric Constant (@ 10 <sup>6</sup> Hz) | 2.66  | 3.1  | 3.80   | 2.5                                 |
| Dielectric Strength (Volts / Mil)          | 1100 Dry<br>976 Wet                                   | 2086   | 380  | 560                                 |
| Volume Resistivity                         | 1x10 <sup>14</sup> Dry<br>9x10 <sup>14</sup> Wet      | 4x10 <sup>13</sup> Dry                                 | 2x10 <sup>13</sup>                                     | 5x10 <sup>13</sup>                  |
| Moisture Resistance                        | 5   | 2  | 4  | 5                                   |
| Resistant to Fungus                        | Yes   | Yes  | Yes  | Yes                                 |
| Ease of Repair                             | 3   | 5  | 2  | 3                                   |
| Flexibility                                | 5   | 2  | 3  | 5                                   |
| Chemical Resistance                        | 4   | 1  | 4  | 2                                   |
| Dry Time To Touch                          | 1 Hour  | 15 Min.  | 15 Min.  | 45 Min.                             |
| Cure Time                                  | 72 Hours  | 24 Hours   | 24 Hours   | 24 Hours                            |
| Accelerated Cure Time                      | 30 min. @ 90°F<br>45 min. @ 200°F<br>Two Step Process | 20 min. @ 120°F<br>30 min. @ 180°F<br>Two Step Process | 20 min. @ 120°F<br>30 min. @ 180°F<br>Two Step Process | 15 min. @ 120°F<br>One Step Process |
| *Removal (2510)                            | 1-5 min.  | 1-5 min.   | 1-5 min.   | 1-5 min.                            |
| Burn Through                               | Yes   | Yes  | Yes  | Yes                                 |

Ratings: 5 - Excellent, 4 - Very Good, 3 - Good, 2 - Fair, 1 - Poor  
All coatings may be thinned by using Fine-L-Kote™ UR Thinner (2105)

\* Available: Conformal Coating Remover  
Product #'s: 2510-P and 2510-N

**MOISTURE RESISTANT**



2102  
2106

**THERMAL RESISTANT**



2102  
2106

**CHEMICAL RESISTANT**



2102  
2104

**STATIC RESISTANT**



2103