

Product
Bulletin

S101

Solvent Based, High Temperature Protective, and Moisture Barrier, Silicone Coating Resin

GENERAL DESCRIPTION

S101 is a high temperature resistance, silicone resin. Extremely tenacious adhesion to a wide range of substrates makes S101 an excellent choice as a barrier, protective, conformal or pain coating.

S101 cures to a high gloss finish and resists cherry red sintering temperatures.

This resin can be thinned, if required, with aromatic hydrocarbon solvents having kauri-butanol values above 50, almost all ketones, chlorinated solvents, glycol esters, and butanol.

A special catalyst is available for use with S101 resin that improves the hardness, heat resistance, and rate of cure.

S101 offers excellent water and chemical resistance, as well as outstanding weatherability. S101 offers excellent corrosion protection and is resistant to 16 hours exposure of 50% sulfuric, hydrochloric, and nitric acids, and 20% sodium hydroxide solutions.

S101 is readily available from stock in a full range of container sizes; see price list. Standard color is clear, however, pigmented colors are available.

Typical applications include moisture barrier coating for capacitors, protective coatings for electronic assemblies and components as well as a broad range of paint coatings where high adhesion and high gloss are important.

SPECIFICATIONS

HANDLING CHARACTERISTICS

<u>Color:</u>	clear, available pigmented
<u>Workable Pot Life, 100 g @ 25°C:</u>	24 hrs.
<u>Mixed Viscosity @ 25°C cps:</u>	200
<u>Shelf Life:</u>	6 months
<u>Recommended Cure:</u>	24 hrs. @ room temp.

PHYSICAL CHARACTERISTICS

<u>Shrinkage Linear, in / in:</u>	0.015
<u>Hardness, Shore D:</u>	70
<u>Specific Gravity, 25°C / 25°C:</u>	1.00
<u>Tensile Strength, psi:</u>	7,000
<u>Compressive Strength, psi:</u>	10,500

THERMAL CHARACTERISTICS

<u>Thermal Conductivity, btu / hr / ft² / °F / in:</u>	2.1
<u>Thermal Expansion Coefficient, (cm / cm / °C · 10⁻³):</u>	3.8
<u>Heat Distortion, °C:</u>	120
<u>Operating Temperature Range, °C:</u>	-80 to +300

ELECTRICAL CHARACTERISTICS

<u>Dielectric Strength, volts / mil:</u>	510
<u>Dielectric Constant, 60 Hz:</u>	3.2
<u>Dissipation Factor, 60 Hz:</u>	0.002
<u>Volume Resistivity, ohm · cm:</u>	1.5 x 10 ¹⁵

INSTRUCTIONS FOR USE

- Apply by brush, roller, spray or dipping.
- Cure:
 - Air dry at room temperature until tack free, plus 1-2 hours at 150°C.
 - With the addition of 10% catalyst, air dry at room temperature, and then 1-2 hours at 100°C.



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