

RTV 800-255

UV Cure Potting Compound



DESCRIPTION

RTV 800-255 is a dual-cure product custom formulated for potting small electronic parts but may also find application as an industrial coating. This non-corrosive, single-component silicone potting will cure to a solid rubber upon exposure to either an ultra-violet light source, or to atmospheric moisture.

APPLICATION

All laboratory experiments were conducted using a "D" bulb for improved adhesion and depth of cure. To achieve a tack free surface requires 0.30 seconds exposure at 500 mW/cm², or 0.60 seconds at 245 mW/cm². As with any UV curing system, longer exposure times are required for lower intensity lamp conditions. As with any single-component moisture-cured material, worklife and cure times of RTV 800-255 are dependent on the environmental conditions such as temperature, humidity and film thickness.

AVAILABILITY

RTV 800-255 is available in 5 gallon, straight-sided pails.

STORAGE

RTV 800-255 may be stored in the original unopened containers at, or below, 80° F (25°C) for up to three months.

PRECAUTIONS

Consult and obey all applicable local, state and federal regulations for disposal of solvent and silicone waste. For additional information consult product M.S.D.S. Do not use in or around highly oxidative chemicals such as liquid oxygen, chlorine or peroxides.

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance		Hazy fluid
Viscosity (LV)	Brookfield #2 @ 12 rpm	1000-2000 cps
Skin Over Time	20 mils @ 50%RH /77F	60 minutes minimum
UV Cure	70-L0-UVcure1	Pass

ADDITIONAL INFORMATION

Not recommended for surfaces that are to be painted. Novagard believes that the information provided is a true and accurate description of the typical characteristics of the aforementioned product; however, it is the responsibility of the individual user to thoroughly test the product in their specific application to determine performance, efficacy and safety.

TYPICAL CURED PROPERTIES*

Physical Property	Test Method	Typical Value
Specific Gravity		0.98 – 1.05
Tensile Strength	ASTM D-412	50 psi maximum
Elongation	ASTM D-412	25% maximum
Shore Hardness	ASTM D-2240	15 ± 5
Solids Content		>95%
Shrinkage	72 hours @60C	<0.5%
Water Absorption	72 Hours	<1.0%
Adhesion		
Tin		250 psi
Gold	ASTM D-1003	130 psi
Nylon		120 psi
Brass		50 psi

ELECTRICAL/THERMAL PROPERTIES*

Physical Property	Test Method	Typical Value
Dielectric Strength	ASTM D-149	400 v/mil
Dielectric Constant (100 Hz / 1 KHz)	ASTM D-150	2.67 / 2.68
Dissipation Factor (100Hz/1 KHz)	ASTM D-150	0.001 / 0.001
Volume Resistivity	ASTM D-257	4.7 x 10 ¹⁵ ? -cm
Coefficient of Thermal Expansion		3 x 10 ⁻⁴ /°C
Operating Temperature		-40°C TO 200°C

*The values outlined reflect testing that was conducted on unpigmented laboratory prepared specimens, actual results may vary. Results are after UV cure plus 7 days at 25°C

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