

RTV 800-260

UV Cure Conformal Coating



DESCRIPTION

Novagard RTV 800-260 is a unique UV/dual cure silicone conformal coating for application on printed circuit boards.

FEATURES & BENEFITS

- Exceptionally fast UV cure
- Single component
- Controlled rheology
- No oxygen inhibition
- Room temperature curing
- Solvent free formulation
- No corrosive byproducts
- UL 746E Listed
- UV tracer for ease of inspection

APPLICATION

To preserve the UL rating of this conformal coating the application of RTV 800-260 must be strictly controlled. Application details should be reviewed with a Novagard representative and matched to the UL listing.

UV CURE CONDITIONS

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 (UVA) or 0.60 seconds at 250 mW/cm² (UVA). As with any UV curing system, longer exposure times are required for lower intensity lamp conditions.

AVAILABILITY

RTV 200-260 is available in, 1-quart metal cans, 5-gallon pails, and 55-gallon drums.

STORAGE

Novagard RTV 800-260 may be stored in the original unopened containers at, or below, 70° F for up to six months.

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance		Clear fluid
Viscosity	Brookfield RV #5 @ 20 rpm	2,000 – 5,000 cps
Skin time (H ₂ O)	1/8" @ 50%RH & 77F	60 minutes minimum
UV Cure	70-L0-UVCure1	Pass

TYPICAL CURED PROPERTIES*

Physical Property	Test Method	Typical Value
Specific Gravity		1.01
Tensile Strength*	ASTM D-412	100 psi
Elongation *	ASTM D-412	100%
Tear Resistance	ASTM D-624 Die "C"	<10 pli
Shore Hardness*	ASTM D-2240	15
Solids Content		>95%
Water Absorption	72 Hours	<0.1%
Shrinkage	72 Hours @60C	<0.5%

ELECTRICAL/THERMAL PROPERTIES*

Physical Property	Test Method	Typical Value
Dielectric Constant	ASTM D-150	3.35 @ 100 Hz
Dissipation Factor	ASTM D-150	0.0034 @ 100 Hz
Dielectric Strength	ASTM D-149	424 v/mil
Volume Resistivity	ASTM D-257	4.58 x 10 ¹³ ohm-cm
Coefficient of Thermal Expansion		3 x 10 ⁻⁴ /°C
Operating Temperature		-40°C TO 200°C

UL 746E Listed	QMJU2	File Number E345993
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*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

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. Not recommended for surfaces that are to be painted.

Form Name
10-D2-RX8260

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Effective Date
01-10-2016

RTV 800-260

UV Cure Conformal Coating

ENVIRONMENTAL AGING

Product was UV cured with standard "H" bulb at 1.04 J/cm² followed by an additional 7 days at 25°C/50% r.h.

168 hours @ 150°C

Δ% Tensile	-15.0%
Δ% Elongation	-10.0%
Δ Shore Hardness	+10.0%

168 hours @ 200°C

Δ% Tensile	-50.0%
Δ% Elongation	-72.4%
Δ Shore Hardness	+35.0%

24 hours @ 263°C

Δ% Tensile	-44.4%
Δ% Elongation	-65.5%
Δ Shore Hardness	+50.0%

Automatic Transmission fluid (Dexron III®)

168 hours @ 150°C

Volume swell = 52.2%

5W30 Motor oil

168 hours @ 150°C

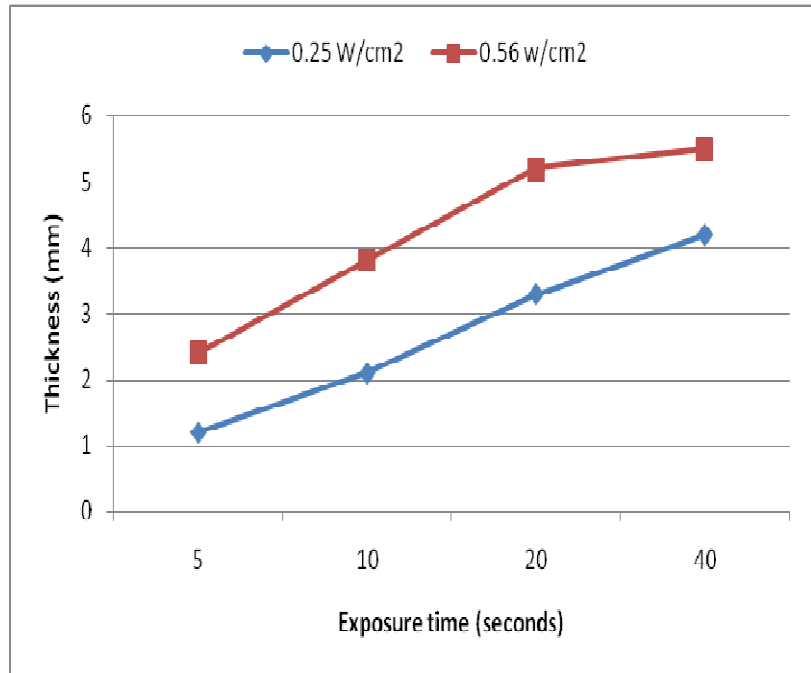
Volume swell = 22.5%

50:50 Glycol:Water

168 hours @ 60°C

Volume swell = 2.7%

DEPTH OF CURE (UV exposure only)



ADDITIONAL INFORMATION

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 user to thoroughly test the product in their specific application to determine performance, efficacy and safety.

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