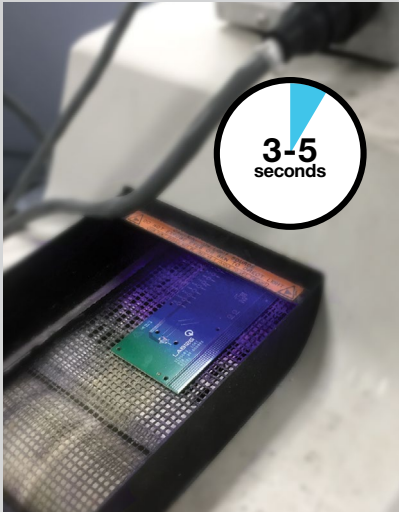


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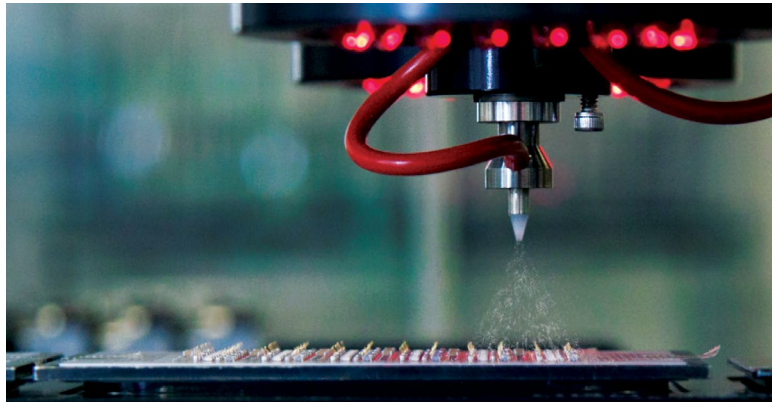
## 800-505 Dual UV/Moisture Cure

Novagard's new 800-505 UV/moisture cure silicone coating dries tack-free in seconds; complete cure requires no oven or racking time. The new 800-505 UV/dual cure allows components to move to the next step of assembly in **3-5 seconds** allowing manufacturers to skip the oven cure and eliminate racking, cutting valuable time off their processes without compromising quality.



- Low viscosity, easily applied using standard PCB spray coating equipment
- Excellent adhesion to a variety of plastic and metal substrates, including FR-4, copper, aluminum, and PET
- 100% silicone
- Solvent free
- Dielectric properties and flexibility expected from a silicone
- Available in a wide range of viscosities; custom formulations available on request

**VOC**  
COMPLIANT  
ENVIRONMENTALLY  
RESPONSIBLE



As with most silicones, 800-505 has excellent dielectric properties and offers better protection from corrosion and other harsh environmental elements than other coating technologies such as acrylics and urethanes. And, there's no compromise on coverage - because 800-505's secondary cure is an electronics-grade, alkoxy cure, with no unreacted coating remaining in shadow areas

Many physical properties of the 800-505 materials can be customized, including viscosity, hardness, and rate of cure. Contact our technical specialists to discuss your customization needs.

### Investigating UV Curing Options?

If you are still heat curing, the introduction of 800-505 means now is the time to move to a UV dual cure process. A 3-5 second silicone cure – no ovens, no racking – changes the game. Even if a modest investment in UV equipment and training was not in the 2020 budget, the certain increases in speed and efficiency assure a fast payback period.

### UV Curing Processes Vary – Get the Results You Need

Although it is a mature technology, a number of common misconceptions persist around the UV curing process, and a surprising number of variables can be fine-tuned to better manage the process. Understanding how to adjust the timing, distance, and even wavelength to achieve the desired hardness and depth of cure is critical. If you are currently using a UV cure technology and are not getting the results you need, contact Novagard's technical support specialists at +1 (216) 881-8111.



## UV Dual Cure 800-505 Conformal Coating

### The 3-5 second silicone cure

In more applications, in more industries, for more parts, coatings are a necessity. In every industry, better coverage and faster processing time is critical.

*“800-505 can take hours (or even days) out of our manufacturing processes.”*

*“No racking, no ovens. It’s a no-brainer - think of the space, maintenance cost, energy savings alone.”*

*“Now we can literally go on to the next step of manufacturing – no racking or drying. In effect, the cure is finalizing while the parts are on their way to the next stage of manufacturing”*

*“A welcome new dual cure coating option.”*



5109 Hamilton Avenue  
Cleveland, OH 44114 USA  
(216) 881-8111 | (800) 380-0138  
(216) 881-6977 fax  
novagard.com

ISO 9001:2015 QMS (with Design)  
IATF 16949:2016 QMS (with Design)  
Certified Women’s Business Enterprise

Effective Date: Feb 2020-v1.5

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## 800-505 Dual UV/Moisture Cure

### Product Specifications

Physical Property	Test Method	Performance Range
Appearance		Clear Fluid
Viscosity	Brookfield RV #5 @ 20 rpm	600 - 1,000 cPs

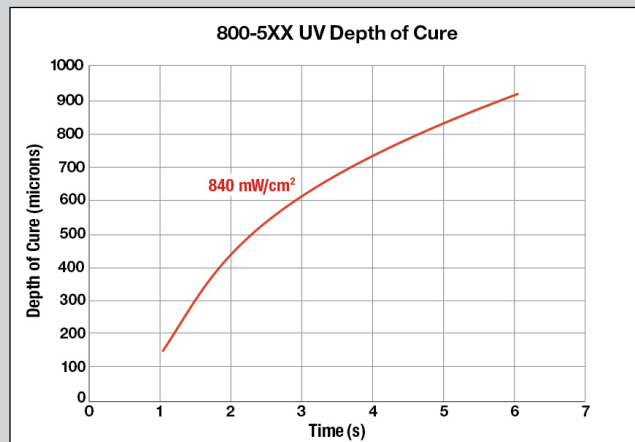
### Typical Cured Properties\*

Physical Property	Test Method	Typical Value
Specific Gravity		0.98 - 1.05
Adhesion		
FR4	ASTM 3359	Pass
Copper	ASTM 3359	Pass
PET	ASTM 3359	Pass
Flexibility		
180 Degree Fold Test		Pass
Shore A	ASTM D2240	10 - 25
Solids Content		>98%

### Electrical/Thermal Properties\*

Physical Property	Test Method	Typical Value
Dielectric Strength	ASTM D146	425v/mil
Dielectric Constant	ASTM D150	3.35 @ 100 Hz
Dissipation Factor	ASTM D150	0.0034 @ 100 Hz
Volume Resistivity	ASTM D257	$4.58 \times 10^{13} \Omega \cdot \text{cm}$
Coefficient of Thermal Expansion		$3 \times 10^{-4} / ^\circ\text{C}$
Operating Temperature		-40°C to 200°C

\*The values outlined reflect testing that was conducted under laboratory conditions, actual results may vary. Results are after UV cure.



Product was UV cured using a F300S/F300SQ Fusion UV System equipped with a standard “H” bulb.

Proudly made in Cleveland, Ohio