# **High Performance Silicones** for Solar Manufacturers





Silicones have emerged as a critical material in the solar manufacturing industry, transforming the way photovoltaic (PV) modules and related components are designed, assembled, and maintained. As solar manufacturers innovate and expand the reach of solar energy, silicones will continue to deliver clean, sustainable, and long-lasting solutions for a brighter future. Novagard offers a suite of solar module manufacturing silicones that are designed, manufactured, and shipped from our plant in Cleveland, Ohio.



- Protect sensitive electronics from rain, humidity, and extreme temperatures
- Extend service life to 30 years by preventing corrosion and fatigue
- · Provide durability with their resistance to weathering and UV damage

## PHOTOVOLTAIC ASSEMBLY ADHESIVES

Novagard's PV assembly adhesives offer very good adhesion to all standard PV substrates, including glass, aluminum, ZAM coated metals, plastics, and composites. They offer outstanding weather and aging resistance, are low odor, and non-corrosive.

Our 2K adhesive has a moderate curing speed at room temperature, with sufficient open time for large components and complex assemblies to come together during panel manufacturing, while providing early green strength for significantly greater throughput than single component condensation cure products. This paste is designed for use in a variety of applications where long-term temperature cycle resistance, UV exposure, and other harsh exposure conditions exist.

Our simple-to-deploy IK adhesive sets quickly and is fast curing, which can help reduce production time. Engineered for strength and flexibility, this product's high modulus ensures lasting durability. It offers outstanding long term resistance to natural weathering, including extreme temperatures, ultraviolet radiation, rain, and snow, with negligible change in elasticity.

### **JUNCTION BOX POTTANT**

Designed for PV junction box potting, our 2K moisture cure silicone provides excellent dielectric insulation and adhesion performance without the need for a primer. UL certified with a V-0 rating, this pottant offers protection from the elements to prevent corrosion within the junction box. This is a fast curing, flowable silicone for simplified j-box assembly. It's formulated to provide resistance to shock and vibration throughout the solar module's lifetime.

# THE NOVAGARD DIFFERENCE

Each of the silicone materials we offer for the solar market is 100% designed and manufactured in the USA. These products:

- cure at room temperature with ambient humidity no ovens are needed, lowering equipment costs and energy use
- have been widely validated in PV modules, including all damp heat aging, salt spray, and electrical testing, ensuring a long outdoor lifespan
- · won't chalk, shrink, or crack, providing stability under UV and extreme weather conditions for decades
- are UL 746 A/B/C certified

Proudly manufactured in Cleveland, OH, our high performance products comply with the Build America, Buy America (BABA) program. Ready to try our materials? Talk with your Novagard sales manager today.

