Novagard® G641
Technical Data Specification

NOVAGARD

DESCRIPTION
Novagard G641 is a heat transfer compound that is formulated with select polydimethylsiloxane fluids in combination with metallic oxide fillers to provide superior thermal conductivity

APPLICATIONS
Novagard G641 is designed for use as a heat transfer compound in both the electrical and electronic industries. Characterized by its high thermal conductivity, high dielectric constant, and high dissipation factor, Novagard G641 is an ideal material for use in thermocouple wells, power diodes, transistors, semi-conductors, and ballasts among various other applications. In the event that silicone oil separation is observed, the product should be mixed to re-incorporate the silicone oil and ensure homogeneous consistency. Once the silicone oil has been re-incorporated, G641 will perform as specified.

RESTRICTIONS
Do not use in or around highly oxidative chemicals such as liquid oxygen or peroxides. Not recommended for application to surfaces that are to be painted.

AVAILABILITY
Novagard G641 is available in 3-ounce squeeze tubes, 1-gallon pails, 5-gallon pails, and 55-gallon drums.

STORAGE
Novagard G641 has a shelf-life of sixty (60) months from the date of manufacture, as indicated by the lot number, when stored in the original, unopened container at, or below, 100ºF (38 ºC).

PRECAUTIONS
Silicone compounds may be cleaned with non-polar solvents such as toluene, hexane, and mineral spirits. Whenever using solvents be certain to observe all proper, safety precautions. Not for application on surfaces that are to be painted

Consult and obey all applicable local, state, and federal regulations for the disposal of solvent and silicone waste. For additional information consult product S.D.S.

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance		White Paste
Penetration (worked 60X)	ASTM D217	240 – 320
Bleed	392ºF (200°C)/24 hours	1.0% maximum
Evaporation	392ºF (200°C)/24 hours	2.0% maximum
Specific Gravity		2.4 minimum

TYPICAL PROPERTIES*

Physical Property	Test Method	Typical Value
Thermal Conductivity		0.7 W/mK
Volume Resistivity	ASTM D257	1.2 x 10^{15} Ω-cm
Dissipation Factor	ASTM D150	0.0074
Dielectric Constant	ASTM D150	4.81
Dielectric Strength 50 mil gap	ASTM D149	300 v/mil

*The values outlined reflect testing that was conducted under laboratory conditions, actual results may vary. The information provided in the above table is not intended for use in preparing specifications. Please consult the manufacturer for additional information.

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

5109 Hamilton Ave., Cleveland, OH 44114 USA | P (216) 881-8111 | F (216) 881-6977 | novagard.com | ISO 9001:2015, IATF 16949:2016