

Thermoset™ LS 213-9 Epoxy Encapsulant

Technical Data Sheet

Thermoset™ LS 213-9 encapsulant is a one-component epoxy impregnating compound for use in electrical lamination and potting applications. It can also be used as a reworkable underfill encapsulant.

Features and Benefits:

Low Viscosity – maintains low viscosity for complete and void-free encapsulation.

Excellent Electrical Stability – provides excellent dielectric properties where high electrical dissipation is required.

Environmentally Resistant – provides good resistance to moisture.

Application:

Mixing – Before using, allow material temperature to adjust to ambient conditions. Consult handling instructions** for specific guidelines.

***Handling instructions are available on LORD.com.*

Applying – Mount the syringe onto the dispensing equipment that has been thoroughly cleaned and purge encapsulant through the system until an unbroken flow of material is extruded. The system is now ready to begin dispensing.

Curing – Allow encapsulant to cure for 2 hours at 120°C, or for 5 hours at 104°C, or for 8 hours at 93°C. This time-at-temperature profile refers to the time the material should be allowed to cure once it reaches the target temperature. Allowance should be made for oven ramp rates, parts with large thermal mass and other circumstances that may delay material reaching the target temperature.

Cleanup – Disposable containers and utensils are recommended when working with epoxies. However, when disposable materials are impractical, uncured encapsulant can be removed by cleaning equipment with solvent. Solvent-cleaned utensils should be thoroughly dried before reuse; any remaining solvent can contaminate the next mixture.

Typical Properties*

Uncured

Appearance	Amber Liquid
Viscosity, cP @ 25°C	2800
Specific Gravity	1.13
Solids Content by Weight, %	100
Working Life, months @ 25°C	3

Cured

Thermal Conductivity, W/m·K	0.1
Glass Transition Temperature (T _g), °C by DMA	80
Hardness Shore D	85
Tensile Strength, MPa (psi)	41.4 (6005)
Volume Resistivity, ohm-cm	2 x 10 ¹⁵
Dielectric Strength, kV/mm (V/mil) ASTM D 149	18.9 (480)
Dielectric Constant 1 kHz, ASTM D 150	3.4
Dissipation Factor 1 kHz, ASTM D 150	0.22

*Data is typical and not to be used for specification purposes.



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Shelf Life/Storage:

Shelf life is four months when stored refrigerated at 5°C in original, unopened container.

Cautionary Information:

Before using this or any Parker LORD product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

Values stated in this document represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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