HERNON®
High Performance Adhesives and Sealants
ISO 9001:2008 Registered

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Technical Data Sheet
Tuffbond® 322

Product Description

Hernon® Tuffbond® 322 is a transparent 2:1 flexible, low viscosity, general purpose resin system used for casting, potting, and encapsulating of electrical and electronic components. This unique product has been formulated to combine ease in handling with optimum physical, thermal and electrical insulation properties.

Typical Applications

- Potting electronic boards
- Potting battery components
- Encapsulating electrical and electronic components
- Transformers
- Coils and chokes
- Solenoids
- Micro circuitry

Product Benefits

- Low viscosity
- Low shrinkage
- Room temperature or heat curing
- Can be used on metals, PVC, phenolics

Typical Properties (Uncured)

Property	Part A	Part B
Base	Epoxy	Modified Amine
Appearance	Clear- Lt Yellow	Pale Yellow
Viscosity at 25ºC, cP	2,000 to 5,000	800 to 1,500
Specific Gravity	1.10	0.98
Mix Ratio, by Weight	2.2	1
Mix Ratio, by Volume	2	1

Typical Properties (Cured)

Physical Properties

Property	Value
Working Life at 22ºC (30g), hours	1.5 – 2.0 hrs
Durometer Hardness, Shore D	30 - 40
Operating Temp., ºF	-60 to 250
Refractive Index	1.521
Thermal Conductivity	0.24 W/m·K
Glass Transition (Tg)	140°C
Coefficient Thermal Expansion (CTE) in/in/°C Above Tg / below Tg	250/200 X 10^{-6}

Typical Cured Performance

Shear Strength

Steel lap-shear specimens tested according to ASTM D1002.

Conditioning		Shear Strength
G/B Steel, Cured 2 Hours at 65ºC		≥ 500 psi
G/B Steel, Cured 24 hours at RT		≥500 psi
Dielectric Strength	ASTM D149	6000 V/mm
Dielectric Constant, 1 KHz	ASTM D150	1.78
Dissipation factor, 1 KHz	ASTM D150	0.0087
Maximum Exothermic Temp	30g mass	120.2 °F

General Information

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Directions For Use

1. For best results, make sure parts are clean and dry.
2. Dispense the product through a static mixer or mix the product (A&B) until thoroughly blended.
3. Apply completely mixed adhesive to the prepared surfaces.

Storage

Tuffbond® 322 should be stored in a cool, dry location in unopened containers at a temperature between 68ºF to 86ºF (20ºC to 30ºC) unless otherwise labeled. To prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

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