

Tuffbond® 313

Product Description

Hernon® Tuffbond® 313 adhesive/sealant is a two component, 100% solid system, one to one ratio, room temperature cure system. **Tuffbond® 313** is recommended for bonding metals, wood, ceramics, etc., and can be used for potting and encapsulation of electrical and electronic components.

Typical Applications

- Marine coating
- Underwater coating
- Potting electronic boards
- Encapsulating electrical and electronic components

Product Benefits

- Good mechanical properties.
- Outstanding resistance to abrasion.
- Non-critical mixing.

Typical Properties (Uncured)

Property	Part A	Part B
Base	Epoxy	Amine
Appearance	White	Light Yellow
Viscosity at 25°C, cP	18,000 to 26,000	18,000 to 26,000
Mix Ratio by Weight	1	1
Specific Gravity	1.17	0.97

Typical Properties (Cured)

Property	Value
Working Life at 22°C (100g), minutes	40 to 60
Hardness, Shore D, ASTM D2240	70-80
Shear Strength – GB Steel, psi ASTM D1002	2500 - 4000
Dielectric Constant at 1kHz	3.38
Dissipation Factor at 1kHz	0.15089
Dielectric Strength, V/m	5-7
Thermal Conductivity, W/mK	0.4

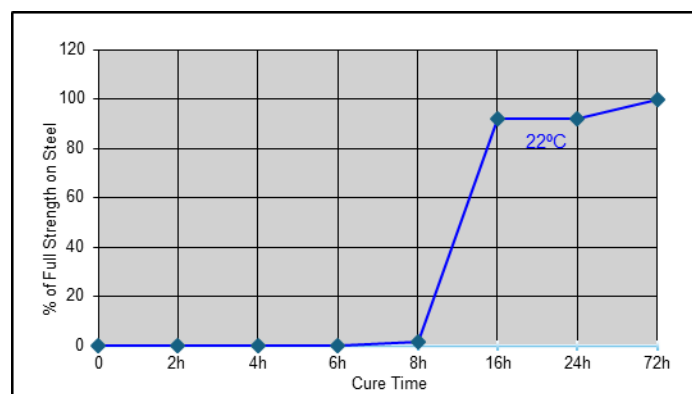
Strength Properties at Different Temperatures

0.25 mm gap and ½ inch overlap on grit-blasted steel
Tested at temperatures indicated, according to ASTM D1002.

Temperature	Shear Strength (psi)
22°C	1,000 – 1,500
-55°C	1,300 – 2,000
80°C	150 – 400
155°C	150 – 400

Cured Speed Information

Shear Strength on steel lap-shear specimens tested at 22°C, according to ASTM D1002.



General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

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

Storage

Tuffbond® 313 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. 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.

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. **HERNON MANUFACTURING®, INC.** shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith. Hernon's Quality Management System for the design and manufacture of high-performance adhesives and sealants is registered to the ISO 9001 Quality Standard.