

## Technical Data Sheet Tuffbond® 317

February 2010

Page 1 of 1

### Product Description

**Hernon® Tuffbond® 317** is a two component, room temperature cure system. By changing the ratio of resin and hardener, the cured adhesive can change from a tough and flexible to a hard and rigid system.

**Tuffbond® 317** is recommended for bonding metal, glass, wood, concrete, and rubber, and can be used for potting and encapsulation of electrical and electronic components.

### Typical Applications

- Tank lining
- Chemical resistant flooring
- Marine coating
- Underwater coating
- Potting electronic boards
- Encapsulating electrical and electronic components

### Product Benefits

- Excellent resistance to organic acids and bases
- Good mechanical properties
- Outstanding resistance to abrasion
- Low temperature cure – Non-critical mixing

### FDA Status

Cured coating formulated with **Tuffbond® 317** epoxy resins, crosslinking agents and adjuncts may be safely used as food-contact surfaces and conform to listing in section 175.300, Title 21 (21 CFR 175.300) of the Code of Federal Regulations. The cured **Tuffbond® 317** epoxy coating may be applied over a metal or other suitable substrate as a continuous film that serves as a functional barrier between food and the substrate. Please review the regulations.

### Typical Properties (Uncured)

Property	Part A	Part B
Base	Epoxy	Amine
Appearance	Clear	Amber
Viscosity at 25°C, cP	12,000	10,000
Specific Gravity	1.17	0.97
Mix Ratio by Weight	100	40 to 110

### Typical Properties (Cured)

Property	Value
Working Life at 22°C (1qt), minutes	40-60
Working Life at 22°C (100g), minutes	80-100
Operating Temp., °F	-65 to 275
Coefficient of Thermal Expansion	60 x 10 <sup>-6</sup> in/in°C
Thermal Conductivity	0.16 K cal/mh°C
Dielectric Strength at 20°C	17 KV/mm
Durometer Hardness, Shore D	82 (1:1 mix)
Shear Strength on Al, 7 day cure at 22°C	2300 psi

### 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 Material Safety Data Sheet (MSDS).**

### Storage

**Tuffbond® 317** should be stored in a cool, dry location in unopened containers at a temperature between 46°F to 82°F (8°C to 28°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.