

## Technical Data Sheet Tuffbond<sup>®</sup> 313

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### Product Description

Hernon<sup>®</sup> Tuffbond<sup>®</sup> 313 adhesive/sealant is a two component, 100% solid system, one to one ratio, room temperature cure system. Tuffbond<sup>®</sup> 313 is recommended for bonding metals, wood, ceramics, etc., 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.
- Non-critical mixing.

### Typical Properties (Uncured)

Property	Part A	Part B
Base	Epoxy	Amine
Appearance	Clear	Amber
Viscosity at 25°C, cP	18,000 to 25,000	18,000 to 25,000
Mix Ratio by Weight	1	1
Specific Gravity	1.17	0.97
Flash Point	See MSDS	See MSDS

### Typical Properties (Cured)

Property	Value
Working Life at 22°C (100g), minutes	40 to 60
Tensile Strength, psi, ASTM D638	5700 - 7100
Hardness, Shore D, ASTM D2240	70-80
Coefficient of Thermal Expansion, in/in/°C ASTM D696	76 x 10 <sup>-6</sup>
Volume Resistivity, ohm-cm, ASTM D696	7.1 x 10 <sup>12</sup>
Glass Transition Temperature, (Tg) °C	87
Flash-Ignition Temperature, °C, ASTM D1929	360
Spontaneous-Ignition Temperature, °C, ASTM D1929	460
Shear Strength – Aluminum, psi ASTM D1002	3200
Temperature Range	-65 to 300 °F (-53 to 149 °C)

### Strength Properties at Different Temperatures

(0.25 mm gap and ½ inch overlap on grit-blasted steel)

Temperature	Shear Strength (psi)
23°C (room temperature)	1,000 – 1,500
-55°C	1,300 – 2,000
80°C	150 – 400
155°C	150 – 400

### 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<sup>®</sup> 313 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**

**Heron**<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Heron**<sup>®</sup> **Sales** for additional information.

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