

## Technical Data Sheet Tuffbond<sup>®</sup> 47771

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### Product Description

Hernon<sup>®</sup> Tuffbond<sup>®</sup> 47771 adhesive/sealant is a two component, 100% solid system, one to one ratio, room temperature cure system.

### Typical Applications

- Tank lining
- Chemical resistant flooring
- Marine coating
- Underwater coating
- Potting electrical components

### Product Benefits

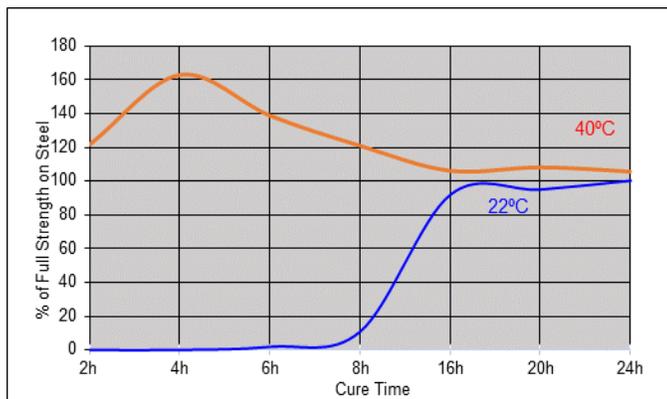
- Excellent resistance to organic acids and bases.
- Good mechanical properties.
- Outstanding resistance to abrasion.
- Non-critical mixing.
- Excellent adhesion to a wide variety of substrates

### Typical Properties (Uncured)

Property	Resin	Hardener
Chemical Type	Epoxy	Amine
Color	Black	Light Amber
Viscosity at 25°C, cP	60,000 to 70,000	60,000 to 70,000
Mix Ratio	1 Part	1 Part
Specific gravity at 25°C	1.19	1.00

### Cured Speed vs Temperature

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



### Typical Cured Properties

Property	Value
Working Life at 25°C, 20g, 1:1 ratio (min.)	40 to 60
Thermal Conductivity, W/m °K	0.65
Glass Transition Temperature, (Tg) °C	77
Coefficient of thermal expansion, ASTM D696 (K <sup>-1</sup> ) :	
Below Tg	18 x 10 <sup>-6</sup>
After Tg	240 x 10 <sup>-6</sup>
Hardness, Shore D, ASTM D2240	70-80

### Typical Cured Performance

Shear Strength on lap-shear specimens tested according to ASTM D1002.

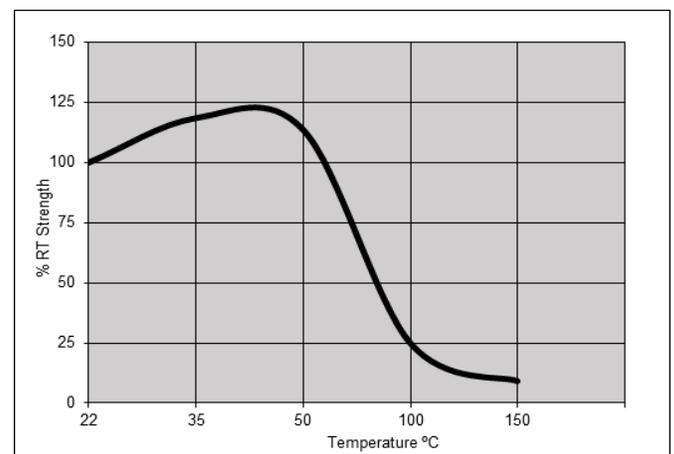
Cure Time at 22°C	Shear Strength (psi)
24 Hours (Steel)	2,000 – 4,500

### Typical Environmental Resistance

Shear Strength on steel lap-shear specimens tested according to ASTM D1002.  
Cured for 72 hours at 22°C.

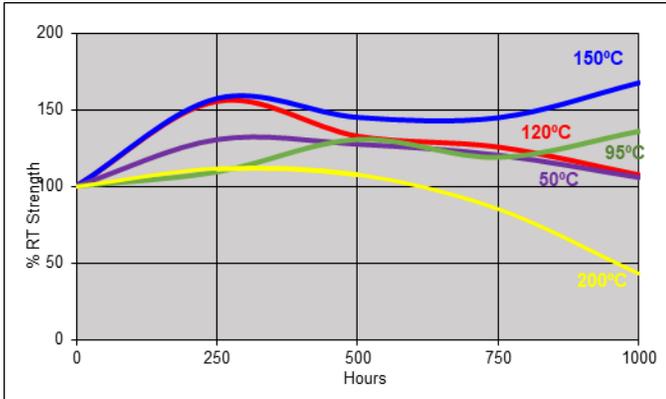
### Hot Strength

Tested at temperature



## Heat Aging

Aged at temperature indicated and tested at 22°C.



## 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® 47771 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**

Heron® offers a complete line of semi and fully automated dispensing equipment. Contact Heron® 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. HERON 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. Heron's Quality Management System for the design and manufacture of high-performance adhesives and sealants is registered to the ISO 9001 Quality Standard.