

## Technical Data Sheet Tuffbond<sup>®</sup> 305

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### Product Description

**Hernon<sup>®</sup> Tuffbond<sup>®</sup> 305** is a modified epoxy adhesive that provides a very fast room temperature cure. **Tuffbond<sup>®</sup> 305** exhibits very good moisture chemical and heat resistance. This very fast cure epoxy adhesive is specially formulated for rapid in-line assembly of loud speakers. **Tuffbond<sup>®</sup> 305** is also recommended for bonding metals, wood, ceramics, etc., and can be used for potting and encapsulation of electrical and electronic components.

### Typical Applications

- Bonding voice coil to cone
- Bonding pole piece to magnet
- Bonding alnico magnet to base
- Rapid curing structural and electrical repair kit
- Rapid curing laminates and "gel" coats
- Potting electronic boards
- Encapsulating electrical and electronic components

### Product Benefits

- Fast at room temperature (about 4 minutes)
- Low shrinkage
- 100% reactive, non-solvent system
- Easy mixing ratio of resin and hardener
- No fuming on gelation

### Typical Properties (Uncured)

Property	Part A	Part B
Base	Epoxy	Amine
Appearance	Clear	Yellow
Viscosity at 25°C, cP	10,000 to 20,000	10,000 to 20,000
Mix Ratio by Weight	1	1
Specific Gravity	1.17	1.13
Flash Point	See MSDS	See MSDS

### Typical Properties (Cured)

Property	Value
Working Life at 22°C (100g), minutes	3
Durometer Hardness, Shore D	86
Operating Temp., °C	-54 to 82

### Typical Cured Performance

#### Room Temperature Cure

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

Cure Time at 22°C	Shear Strength
24 Hours	2400 psi
30 Days	2600 psi

#### Chemical/Solvent Resistance

Shear Strength on Aluminum lap-shear specimens tested according to ASTM D1002. Cured for 24 hours at 22°C. Immersed in Chemical/Solvent for 30 days at 22°C.

Chemical/Solvent	% Strength Retention
10 % Sodium Chloride	83
Distilled Water	81
5% Acetic Acid	79
Petrohol 99	100
Hydrocarbon Test Fluid	94
Ethylene Glycol	100
Hydraulic Oil	99

### 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> 305** 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.

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