

## Technical Data Sheet Fusion Bond 370

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Page 1 of 2

### Product Description

**Hernon<sup>®</sup> Fusion Bond 370** is a two component methacrylate adhesive. It is specially formulated for structural bonding of thermoplastics, metal, wood and composite assemblies. **Fusion Bond 370** is an excellent choice for composite bonding applications in the marine, automotive and construction industries because it requires virtually no surface preparation. **Fusion Bond 370** provides superior toughness at temperatures from -100 to 250°F.

### Product Benefits

- 100% solid
- Easy mixing ratio of 1:1 by volume
- Almost no surface preparation is needed
- Superior fatigue and impact resistance
- Outstanding environmental resistance
- Exceptional at bonding dissimilar substrates
- Excellent salt spray resistance and gap filling ability
- Dramatically reduces assembly cost

### Bondable Substrates

ABS	Phenolics
Acrylics (PMMA)	Polycarbonate and blends
Aluminum	Polysulfone
Brass	Polyurea RIM
Ceramics	Polyurethanes <sup>1</sup>
Copper	PPO and PPO blends
Epoxy	PVC & Vinyls
E-Coat <sup>1</sup>	Rim urethane
Fiberglass	Rubber
Gel Coats	SMC <sup>1</sup>
LMR (Liquid Molding Resins)	Stainless steel
Nylon 6 or Nylon 6 Alloys	Steel
PBT blends	Styrenics
PEEK	Titanium
PET blends	

<sup>1</sup> May need special treatment

### Typical Properties (Uncured)

Property	Part A	Part B
Chemical Type	Methacrylate	Methacrylate
Appearance	White	Blue
Specific gravity	1.04	0.97
Viscosity at 25°C, cP	40,000 to 64,000	40,000 to 64,000
Mix ratio (by weight)	1	1
Flash Point	See MSDS	See MSDS

### Typical Properties (Cured)

Property	Value
Elongation, ASTM D638, %	20 to 40
Hardness, ASTM D2240, Shore D	75 to 80
Glass Transition Temperature, °C	95 to 100
Temperature Range, °C (°F)	-55 to 121 (-67 to 250)
Gap Fill, inches	0.380

### Typical Curing Performance

Property	Value
Working time, minutes	5 to 10
Fixture time, as received steel, mins.	10 to 15

### Typical Cured Performance

Shear Strength, ASTM D1002  
Lap-shear specimens

Substrate	Cure at 22°C	Value, psi
Steel (as received)	1 Hour	2330
	24 Hours	4300
Steel (abraded)	1 Hour	3750
	24 Hours	5040
Aluminum (as received)	24 Hours	1510
Aluminum (abraded)	24 Hours	3660

Shear Strength, ASTM D4501  
Block-shear specimens  
Cured 24 hours at 22°C

Substrate	Value, psi
ABS	620
Epoxyglass	1340
Phenolic	680
PVC	2520*

\* Substrate failure

**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**

**Fusion Bond 370** 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**<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**<sup>®</sup> **Sales** for additional information.

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