HERNON®
Formulating Solutions

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Fusionbond 383

Product Description

Hernon® Fusionbond 383 is a two component, room temperature curing, 1:1 ratio, methacrylate adhesive system. **Fusionbond 383** is formulated to provide fixturing strength within 15 to 20 minutes. This adhesive forms resilient bonds and maintains its strength over a wide range of temperatures. **Fusionbond 383** is suitable for bonding a variety of substrates with a minimum of surface preparation and provides a 100% solids, versatile structural adhesive.

This formulation will offer rapid, high strength and high impact resistant bonds to a variety of substrates within minutes.

Typical Properties (Uncured)

Property	Part A	Part B
Chemical Type	Methacrylate	Methacrylate
Appearance	Clear to light yellow	Pale Yellow
Specific gravity	0.95	0.95
Viscosity at 25ºC, cP	25,000-40,000	6,000-16,000
Mix ratio (by weight)	1	1

Product Benefits

- Halogen Free
- Minimal or no surface preparation.
- 100% solid system
- Excellent chemical resistance
- Excellent environmental resistance.
- Excellent temperature resistance.
- Simple and inexpensive dispensing equipment.
- Rapid room temperature cure.

Typical Curing Performance

Cure Speed
The table below shows the fixture time achieved on steel at 22ºC. Fixture time is defined as the time to develop a shear strength of > 0.1 N/mm².

Substrate	Fixture Time, minutes
Steel	15-20
Working life (22°C)	20-30

Typical Cured Performance

Cured 24 hours at 22ºC.
Shear Strength, ASTM D1002
Grit-blasted lap-shear specimens

Substrate	Shear strength, psi
Steel	>2500
Aluminum	>2000

Block- shear Strength, ASTM D4501
Block-shear specimens

Substrate	Shear strength, psi
Aluminum to Glass	>250

Impact Strength, ASTM D6110
Grit-blasted lap-shear specimens, 22°C

Substrate	Impact resistance, J
Steel	>20

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).

Directions for Use

1. **Fusionbond 383** is useable on a wide variety of surfaces. Substrates should be clean, dry and free of heavy grease. Acid etching or abrading the surface to be bonded may enhance the adhesive properties.
2. Mix A and B components or dispense from static mixer.
3. Apply adhesive to the other surface to be bonded.
4. Join surfaces using sufficient force to spread adhesive thinly.
5. Maintain pressure until handling strength is achieved. Handling strength varies with part geometry, substrate, surface area, tolerances, etc.
6. Release pressure and allow 24 hours for adhesive to fully cure.

Storage

Fusionbond 383 should be stored in a dry place (0°F to 85°F / -18°C to 29°C) in unopened containers, unless otherwise labeled. Bring material stored at the lower half of this temperature range to room temperature before use. 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.