

ReAct[®] 784

Product Description

Heron[®] ReAct[®] 784 has excellent bond strength as a structural adhesive. This formulation will offer rapid, high strength and high impact resistant bonds to a variety of substrates within minutes. Designed for a wide variety of substrates.

ReAct[®] 784 is a room temperature curing adhesive, used in combination with **Activator 15**. This no-mix system allows controlled assembly ideal for production and repair applications. A structural bond develops within minutes.

Typical Properties (Uncured)

Property	Value
Resin	Methacrylate ester
Appearance	White
Viscosity @ 25°C, cP	17,000 to 28,000
Specific gravity	0.97

Typical Curing Properties

Property	Value
Ratio of use	Approximately 10:1 (Adhesive: Initiator)

Product Benefits

- Conforms to the requirements for IAI specification MS050040E on Aluminum
- Bonds to an exceptionally large variety of substrates including metals, plastics, composites, ceramics, glass, wood, leather, rubber and marble.
- Minimal or no surface preparation.
- 100% solid system
- Simple and inexpensive dispensing equipment.
- No shrinkage due to solvent evaporation.
- Rapid room temperature cure.

Typical Curing Performance

Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The table below shows the fixture time achieved on different materials at 22°C. Fixture time is defined as the time to develop a shear strength of > 0.1 N/mm².

One side primed with a minimal thin layer of **Activator 15**.

Substrate	Fixture Time, minutes
G/B Steel	≤10
G/B Aluminum	≤ 4

Typical Cured Performance

Tested on lap-shear specimens in accordance with ASTM D1002.

Cured for 24 hours at room temperature.

One side primed with a minimal thin layer of **Activator 15**.

Substrate	Shear Strength, N/mm ² (psi)
G/B Steel	≥ 20.7 (3000)
G/B Aluminum	≥ 17.2 (2500)
Torque Strength, 3/8 X 16 Steel Nuts and Bolts, 24 hr cure (React 784 applied to bolt and EF Activator 15 to nut)	
Breakaway	200-350 in-lb
Prevailing	100-250 in-lb

Block- Shear Strength

Cured 24 Hours @ 22°C - tested according to ASTM D4501.

One side primed with a minimal thin layer of **Activator 15**.

Substrate	Shear Strength (psi)
Phenolic	329
ABS	1179
Epoxy Glass	654
Acrylic	591
Polycarbonate	357
PVC	805

Directions for Use

1. **ReAct® 784** 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. Apply a minimal thin layer of **Activator 15** to one surface.
3. Apply adhesive to the other surface to be bonded.
4. Join surfaces using sufficient force to spread adhesive thinly. Join parts within two hours of applying primer. Minimizing the on-part time of the primer maximizes consistency in performance.
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

ReAct® 784 should be stored in a cool, dry location in unopened containers at a temperature between 0°F to 85°F (-18°C to 29°C) 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.

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).

Dispensing Equipment

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