

Technical Data Sheet ReAct[®] 783

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Product Description

Hernon[®] ReAct[®] 783 is a tough acrylic adhesive designed primarily for bonding permanent magnets. ReAct[®] 783 has also found wide acceptance in a variety of structural bonding applications due to its versatile performance capabilities.

ReAct[®] 783 is a room temperature curing adhesive, used in combination with Hernon[®] Activator 59 or Activator 63.

Product Benefits

- High impact and shock resistance
- Good gap filling capabilities
- High temperature resistance
- Excellent adhesion to a variety of surfaces
- Consistent rate of cure in 60° to 100°F
- Consistent bond strength
- Eliminates need for mechanical clips
- Requires minimal clamping time
- Room temperature cure, eliminates high cost of energy needed for heat cured material

Typical Properties (Uncured)

Property	Value
Resin	Modified acrylic
Appearance	Clear-yellow liquid
Viscosity @ 25°C, cP	18,000 to 25,000
Specific gravity	0.99

Typical Curing Performance

ReAct[®] 783 is designed to be used with Activator 59 or 63 and cured at room temperature. Cure characteristics are measured by determining fixture time (handling time) and speed of cure.

Fixture Time

Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Fixture time: ≤ 5 minutes

(GB Steel, with Activator 63 on 1 side)

Typical Cured Performance

Cured 24 hours at 22°C. Grit blasted steel specimens.
(Activator 63 applied to one surface)

Test Method	Property	Value (psi)
ASTM D1002	Shear Strength	2000-3500

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).

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some case, these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

Directions for use

1. For best performance bond surfaces should be clean and free from grease.
2. **Activator 59 or 63** should be applied to one of the bond surfaces and the adhesive to the other surface. Parts should be assembled within two hours. Minimizing the on-part time of the activator maximizes the consistency of performance.
3. Where bond gaps are large (up to a maximum of 0.5 mm), or faster cure speed is required, **Activator 59 or 63** should be applied to both surfaces. Parts should be assembled immediately.
4. Excess adhesive can be wiped away with organic solvent.
5. Bond should be held clamped until adhesive has fixtured.
6. Product should be allowed to develop full strength before subjecting to any service loads (typically 24 to 72 hours after assembly, depending on bond gap, materials and ambient conditions).

Storage

ReAct[®] 783 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

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

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