

Technical Data Sheet Magnet Bonder 44803

Product Description

Hernon[®] Magnet Bonder 44803 is a two-part, 1:1 mixable, acrylic adhesive that combines ease of use with a high level of performance. **Magnet Bonder 44803** cures rapidly at room temperature, fixturing parts in 30 to 60 seconds, and cures to full strength in approximately 1 hour. The adhesive was designed specifically for the bonding of magnets and provides excellent adhesion to ferrite and other magnet types.

This product is applied by bead-on-bead. Dispense Part A on one side of the part, then take Part B and dispense on the other part to be bonded. Then place the two parts together to bond and apply slight pressure.

Typical Applications

- Permanent Magnet Brush-Type DC Motors – bonding magnets to frame
- Speaker Assemblies – bonding magnet to pole piece and Basket
- Generators – magnets to housings
- Magnetic Assemblies – ferrite and other magnet types.

Typical Properties (Uncured)

Property	Part A	Part B
Appearance	Light yellow	Blue
Viscosity, cP	30,000	30,000
Mix Ratio, by weight	1	1
Specific Gravity	1.07	1.16
Flash Point	See MSDS	See MSDS

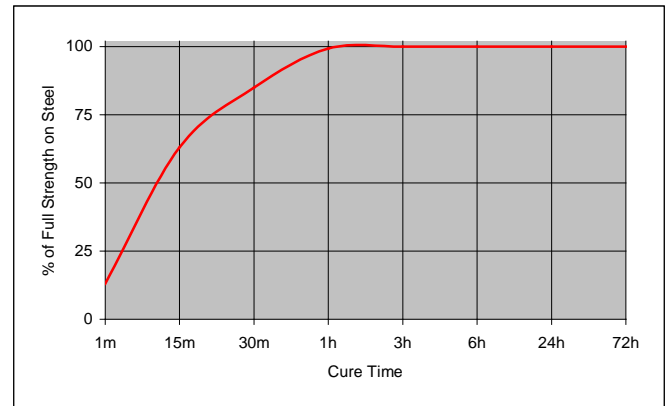
Typical Curing Performance

Working Life and Fixture Time

Property	Value
Working Life, seconds	30
Fixture Time, steel, minutes	≤ 1

Cure Speed

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on grit blasted steel lap shears - tested according to ISO 4587.



Typical Cured Performance

Lap-Shear Strength

Tested according to ISO 4587 on grit blasted steel lap shears. Product applied bead-on-bead.

Cure Time at Room Temp.	Shear Strength, N/mm ² (psi)
1 hour	>13.8 (>2000)
24 hours	>13.8 (>2000)

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).

Application and Dispensing

This product has a typical working life of 30 seconds - dispensing through the use of static mixers is therefore impractical. For best results the use of an external mix dispensing process is recommended. For optimum bond strength on metal parts the surface should be washed with a solvent or cleansing solution, abraded with an abrasive pad, and then rinsed with a solvent of cleansing solution.

Storage

Magnet Bonder 44803 must be stored under refrigeration at a temperature of 45°F ± 5°F for extended shelf life. Before opening, the containers must be warmed to room temperature. To prevent contamination of unused adhesive, do not return product to its original container. Shelf life is 6 months from receipt.

Dispensing Equipment

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

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