

Technical Data Sheet HASA 723

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Product Description

Hernon[®] HASA 723 is a single component anaerobic and UV cure structural adhesive that develops strong bonds through gaps up to 0.02 inches (0.5mm) when cured with **Hernon[®] EF[®] Primer 50**.

Product Benefits

- Improved reliability. Flexible bonds withstand thermal cycling.
- Fast cures at room temperature eliminates expensive ovens.
- Requires no mixing.
- Dispenses easily with automatic equipment.

Typical Applications

- Bonding glass, ceramics and some plastics.
- Ferrite magnets to steel housings.
- Jewelry components.
- DC motor magnets in severe environments.
- Mirrors to die casting.

Typical Properties (Uncured)

Property	Value
Chemical Type	Urethane methacrylate
Appearance	Amber liquid
Specific gravity @ 25°C	1.10
Viscosity @ 25°C, cP	10,000
Flash point	See MSDS

Typical Properties (Cured)

Physical Properties

Property	Value
Coefficient of thermal expansion, ASTM D696 (K ⁻¹)	80 x 10 ⁻⁶
Coefficient of thermal conductivity, ASTM C 177, W/(m·K)	0.1
Specific Heat, kJ/(kg·k)	0.3
Maximum Gap Fill, in.	0.020
Temperature Range, °F (°C)	-65 to 248 (-54 to 120)
Shear Strength-Steel, psi (MPa) ISO 4587	2200 (15.2) with EF [™] Primer 50

Electrical Properties

Property	Value
Dielectric Strength, kV/mm ASTM D149	30
Dielectric Constant @ ASTM D150	100 Hz 5.6 1 kHz 5.3 1 MHz 4.6
Dissipation Factor @ ASTM D150	0.10 kHz 0.03 1 kHz 0.03 10 kHz 0.04
Volume Resistivity, Ω·cm ASTM D257	2 × 10 ¹³
Surface Resistivity, Ω ASTM D257	2 × 10 ¹⁷

Curing Parameters

UV Cure

HASA 723 cures when exposed to UV radiation at 365 nm wave length with **EF[®] Primer 50**.

Heat Cure

Heat can be used to accelerate cures when priming operations are undesirable. The following time/temperature schedule may be used as a guide. Optimum conditions for heat cure should be determined on actual assembly

Bondline Temp.	Cure Time
200°F (93°C)	45 min.

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).

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 cases these aqueous washes can affect the cue and performance of the adhesive.

Storage

HASA 723 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[®] offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**[®] **Sales** for additional information.

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