

HASA 722

Product Description

Heron® HASA 722 is a single-component, anaerobic, structural adhesive designed for bonding rigid assemblies. HASA 722 cure is accomplished when mating surfaces including metal, glass and ceramics are joined together.

Accelerated cures are possible with the application of primers or by a short, low temperature heat cycle. Upon cure, HASA 722 is a highly crosslinked thermoset plastic with excellent properties over a wide range of conditions.

Product Benefits

- Single component, ready to use adhesive.
- Room temperature cure.
- 100% active material, no solvents.
- Easy clean-up. Wipe uncured adhesive from outer surfaces.

Typical Applications

- Bonding ferrite to plated metals in electric motors and loudspeakers.
- Bonding of glass and ceramics.
- Where fast setting of adhesives with high structural properties is required.

Typical Properties (Uncured)

Property	Value
Chemical Type	Urethane
Appearance	Amber liquid
Specific gravity @ 25°C	1.08
Viscosity @ 25°C, cP	8800-13000

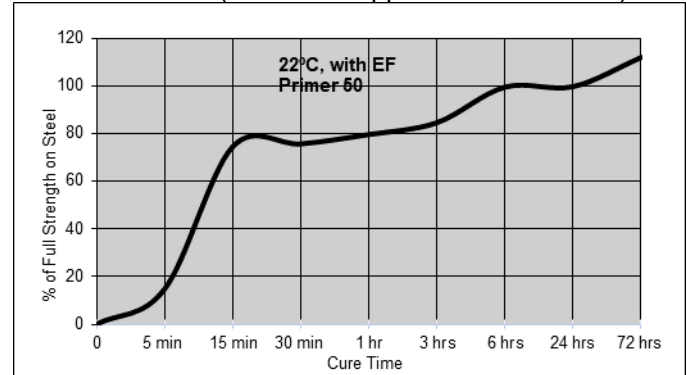
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The table below shows the fixture time achieved at 22°C / 50% relative humidity. Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Substrate	Fixture Time
G/B Steel*	< 30 seconds

* Primer 50 applied to one surface

The graph below shows the shear strength developed with time on grit blasted steel lap shears and tested according to ASTM D1002. (Primer 50 applied to one surface)



Typical Cured Performance

Shear Strength, ASTM D1002
Grit blasted specimens
Cured for 24 hours @ 22°C
Primer 50 applied to one surface

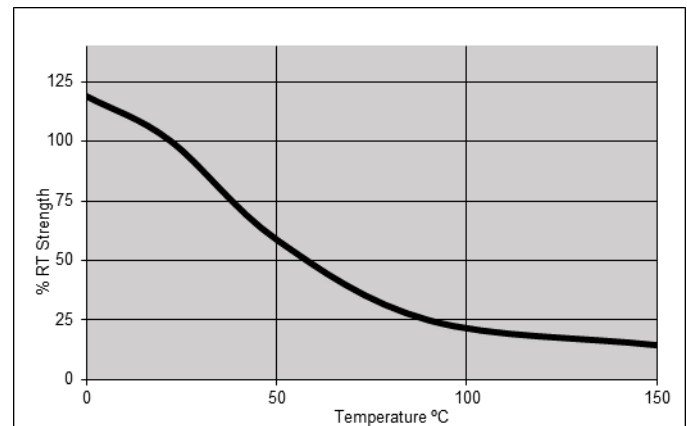
Cure at 22°C	Substrate	Shear Strength (psi)
24 Hours	Steel	1,500-2,500
24 Hours	Aluminum	1,000-2,000

Typical Environmental Resistance

Cured for 1 week @ 22 °C, Primer 50 on 1 side
Shear Strength, ASTM D1002
Grit blasted steel specimens

Hot Strength

Tested at temperature



Hernon® Technical Data Sheet

HASA 722

Heat Aging

Aged at temperature indicated - Tested at 72°F (22°C).

Time	Temperature	% of Initial Strength
Hours	(°C)	
1000	100	136
	120	115

Chemical/Solvent Resistance

Aged under condition indicated - Tested at 72°F (22°C).

Chemical/Solvent	Temp (°C)	% of Initial Strength After 720 hours
Water Glycol 50/50	87	13
Auto. Transmission Fluid	87	77
Gasoline	22	20
Motor Oil	87	112
Humidity, 95% RH	45	59

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). It is recommended to confirm compatibility of the product with such substrates.

Directions for Use

1. For best performance, bond surfaces should be clean and free of grease.
2. To ensure a fast and reliable cure, **Primer 50** should be applied to one of the bond surfaces and the adhesive to the other surface. Parts should be assembled within 15 minutes.
3. The recommended bond-line gap is 0.1 mm. Where bond gaps are large, (up to a maximum of 0.5mm), or faster cure speed is required, activator should be applied to both surfaces. Parts should be assembled immediately, (within 1 minute).
4. Excess adhesive can be wiped away with organic solvent.
5. Bond should be held clamped until adhesive has fixture.

6. Joint should be allowed to develop full strength before subjecting to any service loads, (typically 24 to 72 hours after assembly depending on bond gap and materials).

Storage

HASA 722 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.

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.