

Technical Data Sheet Weld Sealant 433

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Product Description

Hernon[®] Weld Sealant 433 is a single component anaerobic penetrating adhesive and sealant. Utilizing capillary action, **Weld Sealant 433** penetrates and seals porosities and cracks as large as 0.127 mm. Once confined away from air **Weld Sealant 433** cures to a hard thermoset plastic. Sealant remaining on the surface will not cure and can be easily wiped clear. Benefits include retention of fluids and pressures as well as corrosion and contamination elimination. Temperature resistance is up to 400°F (204°C). **Weld Sealant 433** is impervious to most solvents. Welds, castings and powder metal parts can be sealed to their rupture pressure.

Typical Properties (Uncured)

Property	Value
Chemical Type	Methacrylate Ester
Appearance	Amber fluorescent liquid
Specific Gravity	1.06
Viscosity @ 25°C, cP	15
Flash Point	See MSDS

Typical Properties (Cured)

Property	Value
Coefficient of thermal expansion, ASTM D696, K ⁻¹	1×10^{-4}
Temperature Range, °F	-65 to 400

Typical Cured Performance

Tested on 3/8 x 24 steel nuts and bolts according to ISO 10964.

Torque	N _m (in-lb)
Breakaway Torque	≥ 6.8 (≥ 60)
Prevailing Torque	≥ 19.2 (≥ 170)

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).

Directions for Use

- Weld Sealant 433** is recommended for inactive surfaces, such as zinc or aluminum. It can also be used on iron or steel surfaces. However, its rapid cure speed may not allow for total penetration into porosity.
- For best performance all surfaces must be free of dirt and excessive oil. If cleaning is necessary, only non-greasing solvents should be used.
- Apply sealant directly to prepared surfaces.
- Metal temperature may range from 15°C to 60°C. Higher temperatures will open porosities, reduce the viscosity and speed up the cure.
- Brushing is the easiest and most economical means of application. 3 cc's of sealant are required to seal 254 cm of weld when using a 12.7 mm brush .
- Weld Sealant 433** cures between any metallic surface.
- Weld Sealant 433** should be allowed to cure to 50% strength before further processing or testing. Application to non-metallic surfaces may require heat curing.

Storage

Weld Sealant 433 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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