

EST. 1978 TECHNICAL DATA SHEET

ISO-9001

# Nuts N' Bolts® 25203

## **Product Description**

Hernon® Nuts N' Bolts® 25203 is a single component anaerobic penetrating adhesive and sealant. Utilizing capillary action, Nuts N' Bolts® 25203 penetrates and seals porosities and cracks as large as 0.127 mm. Once confined away from air Nuts N' Bolts® 25203 cures to a 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). Nuts N' Bolts® 25203 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     | 1.07                     |
| Viscosity @ 25°C, cP | 9-25                     |
| Flash Point          | See SDS                  |

### **Typical Properties (Cured)**

| Property              | Value      |
|-----------------------|------------|
| Temperature Range, ⁰F | -65 to 400 |

## **Typical Cured Performance**

Cured and tested at  $22^{\circ}$ C on  $3/8 \times 16$  grade 5 bolts and type 2 nuts.

| Cure          | Substrate | Torque     | N∙m (in-lb)               |
|---------------|-----------|------------|---------------------------|
| 30<br>minutes | Steel     | Prevailing | 8.2 to 28.2 (75 to 250)   |
| 24<br>Hours   | Steel     | Breakaway  | 2.3 to 16.9 (20 to 150)   |
|               |           | Prevailing | 16.9 to 56.5 (150 to 500) |
|               | Plated    | Breakaway  | 1.1 to 11.3 (10 to 100)   |
|               | Plated    | Prevailing | 8.2 to 56.5 (75 to 500)   |

### **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).

#### **Directions for Use**

- Nuts N' Bolts® 25203 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.
- 2. For best performance all surfaces must be free of dirt and excessive oil. If cleaning is necessary, only non-greasing solvents should be used.
- 3. Apply sealant directly to prepared surfaces.
- 4. Metal temperature may range from 15°C to 60°C. Higher temperatures will open porosities, reduce the viscosity and speed up the cure.
- 5. Brushing is the easiest and most economical means of application. 3cc's of sealant are required to seal 254 cm of weld when using a 12.7 mm brush.
- 6. **Nuts N' Bolts® 25203** cures between any metallic surface. Full cure occurs after 24 hours.
- 7. **Nuts N' Bolts**® **25203** should be allowed to cure before further processing or testing. Application to non-metallic surfaces may require heat curing.

#### Storage

**Nuts N' Bolts® 25203** 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**<sup>®</sup> offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon**<sup>®</sup> **Sales** for additional information.

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