

High Temperature Stainless, Nuclear Grade

Product Description

Never-Seez® High Temperature Stainless, Nuclear Grade is a superior, high temperature anti-seize and extreme pressure lubricant which protects up to 2200°F (1204°C). It contains fine metallic and graphite particles suspended in a specially formulated grease.

Certified pure for use in nuclear power plants, each production lot of Never-Seez® High Temperature Stainless, Nuclear Grade is tested for contaminants and each container is labeled with the lot number that certifies purity.

Recommended when applications prohibit the presence of nickel, especially when resistance to corrosive acidic and caustic solutions is required.

Product Benefits

- Excellent resistance to corrosion
- Prevents seizure at high temperatures
- Resists galvanic action between dissimilar metals
- Speeds disassembly
- Prevents galling
- Resists alkaline solutions, chemical and acid vapors, road salt, steam, salt water and iodized water

Product Applications

- Fasteners in steel mills, power and nuclear plants
- Stainless steel pipe fittings, flanges, pump fittings and unions
- Fasteners in exhaust manifolds
- Reactor bolts
- Turbine bolts
- Gauges and fittings

Limitations

- Never-Seez® High Temperature Stainless, Nuclear Grade is not recommended for high speed bearing applications. Never-Seez® Red Bearing Lubricant is suggested for these applications.
- In applications where indirect food contact is possible, use USDA approved Never-Seez® White Food Grade with PTFE.

Other Anti-Seize Lubricants

- Regular Grade
- Nuclear Grade, Nickel Special
- Pure Nickel Special
- High Temperature Stainless
- Blue Moly Lubricant
- Black Moly Lubricant
- Red Bearing Lubricant
- White Food Grade with PTFE
- High Temperature Bearing Lubricant
- Pipe Compound with Teflon®
- Mariner's Choice
- Heavy Metal Free
- PetroChem Grade

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Technical Specifications

| | | |
|---|-------------------------------------|--------------------|
| Color | Silver Gray | |
| Temperature Resistance, °F (C) | -297°F to 2200°F (-183°C to 1204°C) | |
| Thickener Type | Lithium Soap | |
| Particle Size, mil (microns) | 2 maximum (50µ) | |
| Density (g/cm3) | 1.21 to 1.28 | |
| | ASTM Test Method | |
| Flash Point, °F (°C) | >300°F (>149°C) | D-92 |
| Copper Corrosion Test @212°F (100°C), 24 hrs. | No corrosion | D-130 |
| Worked Penetration, 60 strokes @ 77°F (25°C) | 265-315 | D-217 |
| NLGI Grade | 1/2 | D-217 |
| Dropping Point, °F (°C) | 360°F (182°C) | D-566 |
| Torque Coefficient, k factor | 0.16 | |
| Water Washout, % loss @ 100°F | <2 | D-1264 |
| @ 175°F | <5 | |
| Four Ball EP | Load Wear Index | 43.6 |
| | Last Non-seizure Load (scar) | 32.0 kgf (0.40 mm) |
| | Last Seizure Load (scar) | 250 kgf (2.14 mm) |
| | Weld Load | 315 kgf |

Specifications: G.E. Atomic Equipment Division, #D50YP12; MIL-A-907.

Ingredients: A special, quality grease containing stainless and other additives.

Shelf Life: Never-Seez® High Temperature Stainless, Nuclear Grade compound does not deteriorate with age when stored unopened at temperatures below 120°F (49°C). Quality and performance are guaranteed for five years from the date of manufacture on unopened containers.

How Never-Seez High Temperature Stainless, Nuclear Grade Affects Torque:

Compared to unlubricated fasteners, the use of Never-Seez High Temperature Stainless, Nuclear Grade can be viewed 2 ways:

- (1) It provides up to 14% MORE clamping force when applying the SAME amount of torque!
- (2) It provides the SAME clamping force when applying up to 14% LESS torque!

IMPORTANT!

- In order to best represent typical torque reduction values, Bostik references a “K-Factor” for unlubricated carbon steel fasteners of 0.185.
- Proper torque is critical and, if not clearly understood, users may over-torque their fasteners which may lead to costly damage. BOSTIK is not liable for any damages incurred. Refer to the Bostik standard warranty for details.

Use in accordance with Material Safety Data Sheet.

Ordering Information:

| NEVER-SEEZ® HIGH TEMPERATURE STAINLESS, NUCLEAR GRADE | | |
|---|--------------|---------|
| DESCRIPTION | STOCK NUMBER | SIZE |
| NGSS-160 NF | Flat Top | 1 lb. |
| NGSS-4 NF | Flat Top | 4 lbs. |
| NGSS-8 NF | Flat Top | 8 lbs. |
| NGSS-8BT NF | Brush Top | 8 oz. |
| NGSS-16BT NF | Brush Top | 1 lb. |
| NGSS-42B NF | Pail | 42 lbs. |

Maximum Specification Limits

| | |
|-------------------|----------|
| Arsenic, As | <50 ppm |
| Antimony, Sb | <50 ppm |
| Bismuth, Bi | <50 ppm |
| Cadmium, Cd | <50 ppm |
| Gallium, Ga | <50 ppm |
| Indium, In | <50 ppm |
| Lead, Pb | <10 ppm |
| Mercury, Hg | <1 ppm |
| Silver, Ag | <50 ppm |
| Tin, Sn | <50 ppm |
| Zinc, Zn | <50 ppm |
| Total Chlorine | <200 ppm |
| Total Nitrate | <200 ppm |
| Total Sulfur | <200 ppm |
| Total Phosphorous | <200 ppm |

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N22-062008