



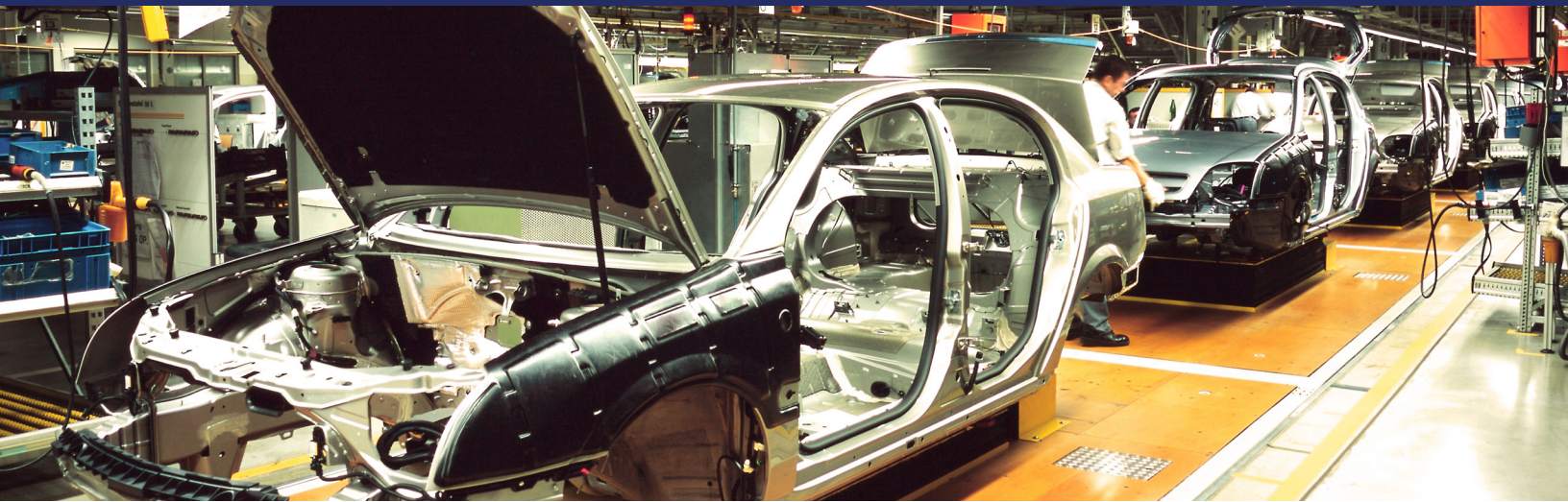
BOSTIK



NEVER-SEEZ[®]

Anti-Seize & Lubricating Compound

**SETTING THE INDUSTRY STANDARD FOR NUT AND BOLT
ASSEMBLY AND DISASSEMBLY**



NEVER-SEEZ: ANTI-SEIZE AND LUBRICATING COMPOUNDS

For over half a century, Bostik's Never-Seez product line has been recognized as the industry leader in anti-seize and lubricating compounds. Applied to nut and bolt assemblies, these compounds act as sealants and are carefully formulated to reduce friction and increase joint tightening capabilities.

Available in different grades for specific environments, Never-Seez offers the following:

FEATURES	BENEFITS
Protection from seizure at high temperatures for stainless steel parts	Bolts, flanges and other parts are removed in less time without damage
Resistance to galvanic action between dissimilar materials	Dissimilar materials do not react at contact interface and allow smooth operation
Prevention against galling	Prevents damage at assembly, lowering scrap costs, speeding disassembly
Protection from carbon fusion, rust and corrosion	Parts do not corrode, extending service life and aiding in non-destructive disassembly
Resistance to age deterioration, chemical and acid vapor, road salt, steam and water	Part life is extended and product durability enhanced

Never-Seez products are also inert to most gases, including propane, butane, natural gas, helium, freon and nitrogen. Impervious to strong alkaline solutions, they offer excellent lubricity and resist hardening, separation and evaporation.

TORQUE REDUCTION VALUE

How Never-Seez Affects Torque and Clamping Force

Compared to unlubricated fasteners*, the use of Never-Seez in an application provides:

1. The SAME clamping force when applying up to X% LESS torque.
2. X% MORE clamping force when applying the specified torque.

* The percentage (X%) variable depends on which Never-Seez product is selected for the job. In order to best represent typical torque reduction value, Bostik engineers reference a "K-Factor" for unlubricated carbon steel fasteners of 0.185. By dividing the selected Never-Seez product "Torque Coefficient, K-factor" by this base line of 0.185 will provide the Never-Seez product X% difference in torque value. Each Never-Seez formula offers unique performance features engineered for its targeted applications. Refer to product information sheets at www.bostik.com/us.





WHY USE NEVER-SEEZ COMPOUNDS?

Setting the industry standard, Never-Seez is specified for major industrial and government use, offering three key value propositions:

SUPERIOR PART PROTECTION

These Never-Seez compounds seal and protect metal parts under extreme conditions of heat, pressure and contamination. The protective coating remains even after extended exposure to the elements, ensuring trouble-free protection against seizure, corrosion, pitting and galling.

RAPID PART DISASSEMBLY

These compounds eliminate common seizure causes when disassembling machinery, piping and metal parts, such as thread distortion, effects of exposure and galvanic action. By avoiding these issues, parts can be disassembled without destruction.

MANUFACTURING COST SAVINGS

Never-Seez compounds reduce downtime and maintenance costs, especially due to their superior spreadability, enabling up to 6,480 sq. in. coverage per lb. based on 4 mil. film thickness.



NEVER-SEEZ PRODUCT LINE

Comprised of nine different grades, the Never-Seez product line offers custom formulations designed to meet the most strongest application needs.



Regular Grade, the “original” anti-seize compound and extreme pressure lubricant, protects metal parts against rust, corrosion and seizure. Formulated with copper, graphite, aluminum and other ingredients, this Never-Seez product can also protect parts in high heat, high pressure and corrosive environments.



Blue Moly is designed for applications requiring non-destructive assembly and disassembly where combinations of high loads, high temperatures and low speeds are encountered to reduce friction during assembly. Blue Moly withstands pressures of 300,000 PSI. The exclusive combination of molybdenum disulfide and pure nickel flake suspended in a premium-grade grease works in a wide range of applications. Blue Moly is especially recommended for those applications in which graphite, zinc, lead and copper are prohibited or undesirable. The addition of special corrosion inhibitors makes Blue Moly an effective choice of use in harsh environments.



Never-Seez **Pure Nickel Special** and Nickel Nuclear Grade are superior, high temperature, extreme pressure anti-seize compounds. They contain flake particles of pure nickel, graphite and other additives in a special grease carrier found to enhance anti-seize performance.



Never-Seez **High Temperature Bearing Lubricant** is an exclusive combination of a specially formulated high temperature grease and lubricating enhancers that provide maximum high pressure resistance and long-lasting lubrications at high temperatures. High Temperature Bearing Lubricant is recommended for ball and roller bearings, bushings, open and sealed bearings.



While the same high quality product as Pure Nickel Special, **Nickel Nuclear Grade** is specially tested and certified pure for use in nuclear power plants. Each production lot of Nuclear Grade is tested for contaminants of sulfur, halogens and low-melt metals. Each container of Nuclear Grade is labeled with the lot and test report number to certify purity.

Both products are recommended for use when applications prohibit the presence of copper, especially when chemical resistance is required.

SPECIFICATIONS:

- GE Nuclear Energy D50YP12 / GE D6Y6C1



Never-Seez **Mariner's Choice** prevents rust, galling and galvanic corrosion in salt water, salt air and high moisture environments. Specially formulated for wet applications, this product was developed after years of working with marine engineers to provide superior part protection for above and below the water line applications without polluting the environment.



Never-Seez **High Temperature Stainless** is a stainless steel, graphite, aluminum based anti-seize compound formulated to protect against seizure and galling, galvanic and severe environmental corrosion.



Never-Seez **Pipe Compound** is a superior lubricating and anti-seize compound formulated to provide maximum thread lubrication in a wide range of pipe threads and fittings. The use of polytetrafluoroethylene (PTFE) and other sealant enhancing additives in this product allows greater thread engagement and more positive sealing. These benefits assure more reliable sealing on “start-up” and throughout the life of the assembly. Pipe Compound also prevents corrosion and galling of threads for easy disassembly. Recommended for use on black iron, galvanized stainless steel and high pressure steam pipes in contact with cast iron, malleable iron, brass, stainless steel or galvanized fittings.



Never-Seez **High Temperature Stainless Nuclear Grade** is the premium grade anti-seize compound developed in conjunction with Electricite de France (EDF) for use in nuclear power plants to protect nuclear components from seizure and galling. Each production lot of Nuclear Grade is tested for contaminants of sulfur, halogens and low-melt metals, and each container is labeled with the lot number to certify purity.

Products were specifically designed for applications that cannot use nickel-based products.

SPECIFICATIONS:

- GE Nuclear Energy D50YP12



Black Moly lubricant is designed for industrial applications requiring non-destructive assembly and disassembly of components. This multi-purpose lubricant contains a high concentration of molybdenum disulfide, making it the most effective choice for extreme pressure applications, such as under heavy loads and slow speeds, which can result in boundary lubrication failure. Black Moly withstands pressures up to 500,000 PSI.



White Food Grade with polytetrafluoroethylene (PTFE) is a premium quality lubricant composed entirely of ingredients that meet FDA requirements for applications in which incidental food contact is possible. With an NSF International registered H-1 Rating, this product is for use in establishments operating under the Federal Meat and Poultry Products Inspection Program. The unique dispersion of FDA-approved PTFE provides additional lubricity especially when a thin film of lubricant is desirable. White Food Grade with PTFE is virtually odorless, colorless and tasteless. It is a multipurpose lubricant for varied services within a food handling plant.

PRODUCT APPLICATION GUIDE

Product	Torque Reduction (Anti-Seize Abilities)	Temperature Levels	Chemical Resistance	Fresh/Salt Water Corrosion Resistance	Aluminum/ Soft Metals	For Use On			Special Formulations	Low Speed/ High Load	High Purity*
						Carbon Steel	Stainless Steel				
Regular Grade	●●	1600 - 1800°F	●	●●	●●	●●	●●	N/A	●●	●●	
Pure Nickel Special	●●	2000 - 2400°F	●●●	●	●	●●●	●●●	Copper Free	●	●●	
Black Moly	●●	-150 - 1500°F	●●●	●	●	●	●	Copper & Graphite Free	●	●	
Blue Moly	●	10 - 750°F	●	●	●	●	●	Metal Free	●●●	●	
High Temp Stainless	●●	2000 - 2400°F	●●●	●	●	●	●	Copper Free	●	●●	
Mariner's Choice	●●●	2000 - 2400°F	●	●●●	●●●	●●●	●●●	Copper Free	●●	●	
High Temp Bearing Lubricant	●	500 - 1000°F	●	●	●	●	●	N/A	●	●	
White Food Grade with PTFP	●	-5 - 475°F	●	●	●●	●	●	N/A	●	●	
Pipe Compound	●●	-50 - 525°F	●	●	●	●	●	Copper, Metal & Graphite Free	●	●	
Nickel Nuclear Grade	●●	2000 - 2400°F	●●●	●	●	●●	●●	Copper Free	●	●●●	
High Temp Stainless Nuclear Grade	●●	2000 - 2400°F	●●●	●	●	●●	●●	Copper Free	●	●●●	

● Acceptable ●● Good ●●● Preferred

*Purity is based on content analysis of heavy metals and other trace minerals.



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