



**ANTI-SEIZE TECHNOLOGY**  
A.S.T. Industries, Inc.

## Anti-Seize Compounds How to Choose an Anti-Seize

Anti-Seize Technology's anti-seize compounds contain a high percentage of engineered solids. Composed of pure copper, aluminum, nickel, molybdenum disulfide, zinc, as well as highly lubricious graphite particles, dispersed into high melting point grease and fortified with advanced rust, corrosion inhibitors, Extreme Pressure Additives and no cheap fillers. We formulate and manufacture all of our compounds enabling us to control the highest quality available.

### WHAT MAKES OURS DIFFERENT

Our anti-seize compounds perform exceptionally well in a wide variety of applications. Our anti-seize compounds prevent parts from galling and seizing together under harsh conditions making assembly and disassembly a snap. We have maintained high percentages of metal flake and solids, to ensure compliance and ability to pass the Military Specifications. Most of our formulas meet the Performance requirements of MIL-PRF-907F (previous MIL-A-907).

Anti-seize compounds were engineered for stationary assemblies or very slow moving parts with heavy bearing loads. When one sees "PSI" with Anti-seize compounds it should be known this is static pressures and not dynamic pressures as associated with sealants for liquids or gas.

### DETERMINING WHICH ANTI-SEIZE WILL SUIT THE APPLICATION SUCCESSFULLY

When asked your recommendation on which anti-seize to use, always ask the questions: What is the application? What environment will this be in? Are there acids, alkalis or chemicals that may come in contact with the anti-seize? Is there a temperature requirement to withstand? Is carbon residue an issue?

### SPECIFICS AND DETERMINING FACTORS

**COP-GRAF™: A general-purpose anti-seize compound. Blend of copper and graphite in a petroleum base grease 1800°F.**

**Thousands of application uses, a great choice for general assembly applications.**

- Protects against rust and corrosion
- Reduce friction
- Speeds up assembly and disassembly
- Retards galvanic reaction between dissimilar metals
- Compatible with all types of metals and most plastics
- Resist seizing, galling, and cold welding
- Non-hardening and non-dripping
- Resists salt water corrosion

**Moly-LIT™: high lubricity, low coefficient of friction, heavy bearing loads. A blend of molybdenum disulfide and graphite in a petroleum base grease 2400°F.**

**Resists extreme pressure applications. This low coefficient of friction prevents wear or galling on gears or splines operating under high load at low speed.**

- Non-Reactive, resistance to Chemicals and Extreme Corrosive Conditions
- No copper or aluminum.
- Long-term protection against rust and corrosion.
- Reduces friction on all metal surfaces.
- Protects load-bearing surfaces during critical wear-in.



**ANTI-SEIZE TECHNOLOGY**  
*A.S.T. Industries, Inc.*

**ANTI-SEIZE SPECIAL™: General-purpose anti-seize compound. A blend of aluminum, copper and graphite in a petroleum base grease 1800°F.**  
Properties similar to our COP-GRAF™ with the aluminum added for a better resistance to corrosion.

- Protect against rust and corrosion
- Reduce friction
- Speed assembly and disassembly
- Retards galvanic reaction between dissimilar metals
- Compatible with all types of metals and most plastics
- Resist seizing, galling, and cold welding
- Non-hardening and non-dripping
- Resists salt water corrosion

**NICKEL-GRAF™: Blend of nickel and graphite in a petroleum base grease 2600°F.**  
Recommended when very different metals are used together such as brass and steel or where high nickel alloy metals like stainless steel are involved also use where soft reactive metals such as copper cannot be present. Use where anti-seize may come into contact with acids, chemicals.

- Delivers maximum protection from acids, caustics, chemicals, and extreme heat
- Eliminates galling and cold welding
- Reduces friction, lowers torque
- Provides nickel plating as a barrier between metal surfaces
- Protects against corrosion and oxidation
- Speeds assembly and disassembly

#### **MARINE GRADE™ NON-METALLIC ANTI-SEIZE**

- Different design features compared to a regular anti seize compound, think of a Marine Grade as an anti seize compound on Steroids
- Our Marine Grade Non-Metallic was designed as a totally new product to give the Marine Industry an anti-seize unlike most all other so called "Marine Grade" anti-seize products which virtually eliminates corrosion due to dissimilar metals in a salt water environment.
- Contains semi-synthetic hybrid grease, which we engineered to provide a very high film strength, which stands up to heavy loads without seizing or galling of the threads.
- Marine Grade has a somewhat tacky consistency which allows the product to tenaciously adhere to your parts, wet or dry
- This product contains twice the rust and oxidation inhibitors than a standard anti seize compound and they were specifically picked for both fresh and salt-water corrosion resistance.
- High solids content packs the voids in threaded assemblies and provides a physical barrier that prevents seizing or galling of the connection



**ANTI-SEIZE TECHNOLOGY**  
A.S.T. Industries, Inc.

**ZINC ANTI-SEIZE™: Zinc dust and petrolatum compound 750°F.**

**For use on threaded joints, aircraft spark plugs, threaded steel parts assembled in aluminum or zinc castings.**

- Conforms to MIL-T-22361, MIL-AA-59313.
- Corrosion protection up to 750°F (399°C).
- Resists seizing in aluminum, aluminum alloys, and iron assemblies.

**ALUMINUM PLATE™ COPPER PLATE™ NICKEL PLATE™ and MOLY PLATE™**

Offer the same benefits of our other anti-seize compounds but are made with a synthetic base grease which does not form abrasive carbon residue at high temperatures.

**Anti-Seize Technology also offers two Food Grade Anti-Seize Compounds.**

**PURE WHITE™ w/PTFE 475°F**

- Pure, tasteless, non-toxic, non-staining
- NSF H-1 and FDA approved
- PTFE insures maximum lubrication
- Superior anti-wear properties
- Excellent resistance to wash out

**HI-TEMP FOOD GRADE™ 2100°F**

- Pure, tasteless, non-toxic, and non-staining.
- NSF H-1 and FDA approved.
- May be used with potable water.
- High solid content for long life.
- Excellent resistance to wash out.

**Where to use Anti-Seize Compounds:** All nuts and bolts, bushings, centers, cam rollers, conveyors, couplings, dies, drills, fittings, flanges, gears, keyways, motors, press fits, pumps, shafts, sleeves, slides, spark plugs, taps, valves, wristpins, and more. They are used in steel mills, foundries, oil refineries, chemical plants, construction and farm equipment, autos, trucks (fleet maintenance), electric power and other utilities, oil drilling, mining, diesel and gasoline engines, marine motors, shipyards, paper mills, and machine shops

