



# NIKAL<sup>®</sup> NUCLEAR

## HIGH TEMPERATURE ANTI-SEIZE

### DESCRIPTION

**NIKAL<sup>®</sup> NUCLEAR** is a premium anti-seize compound that contains chemically-pure nickel flake in a water resistant, complex soap thickened synthetic fluid that offers superior protection against rust and corrosion.

**NIKAL<sup>®</sup> NUCLEAR** contains a high carbon synthetic graphite, which has the benefit at elevated temperatures of providing lower torques upon disassembly. The carefully selected solids package in **NIKAL<sup>®</sup> NUCLEAR** produces a matrix of particles that settle in successive layers. This allows the solids to serve as a lubricant, cushion, and seal. This layering does not allow welding under pressure that leads to seizure and galling.

**NIKAL<sup>®</sup> NUCLEAR** contains no copper, lead, sulfur, halogens, or other ingredients that may poison reactor catalyst beds. It is formulated for use in Class 1, 2, and 3 nonwetted applications for auxiliary equipment in nuclear power plants.

**NIKAL<sup>®</sup> NUCLEAR** is manufactured to exact standards in a certified ISO 9001 manufacturing and test facility. Each container is accompanied by a "Certificate of Conformance" that details purity level standard met per batch.

**NIKAL<sup>®</sup> NUCLEAR** has been approved by General Electric and Westinghouse for use with their turbine systems in nuclear applications and conforms to the requirements of NAVSEAINST 9210.36B.

- Contains no lead, copper, or molybdenum disulfide
- Prevents seizure up to 2600°F (1427°C)
- Protects against rust and corrosion
- Chemical and oxidation resistant
- Exceeds all purity level standards for nuclear grade products - CERTIFIED
- Traceability with 100% testing prior to packaging
- Conforms to MIL-PRF-907F
- Not for use on oxygen lines

### APPLICATIONS

Used extensively in nuclear power generator facilities on land and sea where only CERTIFIED products are allowed.

### PRODUCT CHARACTERISTICS

Thickener	Complex Soap
Fluid Type	Synthetic
Color / Appearance	Silver/Grey Paste
Density (lb/gal)	9.65
Specific Gravity	1.16
Flash Point (ASTM D-92)	>430°F (221°C)
K-Factor*	0.15
Carbon Steel Alloy @ 60,000 PSI Contact Stress	
Penetration @77°F (ASTM D-217)	300 – 330
Copper Strip Corrosion (ASTM D-4048)	1A
4-Ball (ASTM D-2596)	
Weld Point, kgf	400 Typical
Service Rating	-65°F (-54°C) to 2600°F (1427°C)

\* (T = K x D x F) where:

T = torque, K = nut factor, sometimes called the friction factor, D = bolt diameter, and F = bolt tension generated during tightening.