

HIGH TEMPERATURE ANTI-SEIZE COMPOUND

DESCRIPTION

NIKAL® is a premium quality anti-seize and gasket compound for use in extreme temperatures and hostile environments. The carrier of this remarkable compound volatilizes upon exposure to high temperatures and deposits a nickel metallic plating on threaded connections, preventing metal-to-metal contact and guarding against seizing and galling.

NIKAL® contains pure nickel flake and a nearly inert dispersing solid in a high quality complex base grease that provides unsurpassed protection from rust by water penetration or water wash off. The solids package in **NIKAL®** produces a matrix of particles that settle in successive layers or "sandwich." This allows the solids to serve as a lubricant, cushion and seal. This layering does not allow the welding under compaction that leads to seizure and galling.

NIKAL® does not contain copper, lead, graphite, chlorides or other halogens, phosphorus, or silicones. It may be safely used with ammonia, acetylene and vinyl monomers, which are unstable in the presence of copper. **NIKAL®** contains no graphite, which is a benefit on stainless steel applications when temperatures exceed 550°F, as graphite can carburize the steel causing the steel to become much more susceptible to intergranular corrosion.

- Prevents seizure up to 2600°F (1427°C)
- Protects against rust and corrosion
- Chemically inert
- Acid resistant
- Strong resistance to water wash off
- Brushable to 0°F (-18°C)
- Will not run, drip or settle out
- Contains no lead, copper or graphite

APPLICATIONS

Used extensively in refineries, chemical plants, petrochemical plants, power generation facilities and other harsh environments on items such as:

Burner Tips	Reactor Bolts
Heat Exchangers	Manifolds
Furnace Hinges	Manhole Studs
Pipe Fittings	

Conforms to Military Spec MIL-PRF-907F

Service Rating: -65°F (-54°C) to 2600°F (1427°C)

Note: Not for use on oxygen lines.

PRODUCT CHARACTERISTICS

Thickener	Complex Soap
Fluid Type	Petroleum
Color / Appearance	Silver/Grey Paste
Dropping Point (ASTM D-566)	450°F (232°C)
Density (lb/gal)	10.0 Typical
Specific Gravity	1.20 Typical
Oil Separation	<5.0
WT. % LOSS @ 212°F (100°C)	
Flash Point (ASTM D-92)	>430°F (221°C)
Nut-Factor*	0.15
Carbon Steel Alloy @ 60,000 PSI Contact Stress	
NLGI Grade	1 ½
Penetration @77°F (ASTM D-217)	300 – 330
Copper Strip Corrosion	1A
(ASTM D-4048)	
4-Ball (ASTM D-2596)	
Weld Point, kgf	500
Load Wear Index	Not Applicable
Salt Fog Resistance	+200
(ASTM B-117)	
20% NaCl @ 100°F, Hrs. Free of Corrosion	

* (T = K × D × F) where:

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