

KORR-GUARD™

STORAGE COMPOUND

DESCRIPTION

KORR-GUARD™ is a water displacing, specialized formula utilizing a unique approach to rust and corrosion resistance. Many of the corrosion resistant greases on the market are petroleum base oils thickened with 3% to 9% soap. The soaps are typically lithium, aluminum and anhydrous calcium and the resulting grease is treated with 2-5% rust inhibitor. The rust inhibitor is oil soluble and surface active, wanting to wet out on the steel surface. Over a time, the oil separates and the low additive content depletes. **KORR-GUARD** actually complexes the rust inhibitor in high quantity as a component in the thickener. The thickener holds the rust inhibitor in place so additive depletion becomes a less significant factor in long term storage.

The chemical complexing of the rust inhibitor into the soap structure also results in a significant yield reduction. Therefore, the soap requirement goes up significantly. The soap content with this system ranges from 25 - 40% depending upon the intricate processing variables involved. In a grease, it is the thickener/soap which adheres to metal, not the oil. Therefore, the greater quantity the soap content, the longer the product will last.

KORR-GUARD is a semifluid product for ease in application onto threads. It easily flows into the thread roots displacing moisture as the product "wets-out" onto the steel surface. **KORR-GUARD** is an NLGI "0" grade product with a cone penetration range of 355 to 385 mm x 10⁻¹. **KORR-GUARD** is also slightly over-based to protect against acid fume or oxidation. Petroleum oils oxidize to form carboxylic acids.

APPLICATIONS

A protective grease-like coating to protect equipment and threaded pipe ends against rust and corrosion.

PRODUCT CHARACTERISTICS

Thickener	Calcium Soap
Fluid Type	Petroleum & Synthetic
Color	Pale Olive Green
Dropping Point (ASTM D-566)	425°F (218°C)
Specific Gravity	.94
Density (lb/gal)	7.85
Flash Point (ASTM D-92)	>430°F (221°C)
NLGI Grade	0
Penetration @77°F (ASTM D-217)	370
Salt Fog/Spray Resistance (ASTM B117)	
20% NaCl, 100°F, hours	>250
Service Temperature	-40°F (-40°C) to 425°F (218°C)

PACKAGING

Code No.	Container Size	Container
78823	1 gal.	Pail
78816	5 gal.	Pail
78824	15 gal.	Drum
78829	50 gal.	Drum

LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

CORPORATE LOCATIONS



ReinhardOil.dk
Helleruplund Alle 8
DK-2900 Hellerup
Tel: +45 70 26 70 07
CVR 32659470
www.reinhardoil.dk

JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: **KORR-GUARD™**
Chemical Family: Petroleum based lubricating grease.
Use: Rust inhibiting compound for pipe thread storage.

Supplier:



ReinhardOil.dk
 Helleruplund Alle 8
 DK-2900 Hellerup
 Tel: +45 70 26 70 07
 CVR 32659470
 www.reinhardoil.dk

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum Oil	64742525/64742570 26264062/3159624	40-60	Oil mist TWA-5mg/m ³	N/A	STEL: 10mg/M ³
Calcium Sulfonates	57855773	40-60	UN	UN	UN
Nonhazardous Blend	471341	2-5	UN	UN	UN

Main Hazards—Health Effects

Eyes: May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.
Skin: Possible rash for persons with hypersensitivity.

Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist.
Unsuitable Extinguishing Media: Water jet. **Protective Equipment for Fire fighting:** Self-contained breathing apparatus.

Personal Precautions: Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains.
Spillage: Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

Handling: No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

Respiratory Protection: None needed. **Hand Protection:** Protective gloves for hypersensitive persons.
Eye Protection: Glasses, if applied to parts in motion. **Body Protection:** Overalls.

Physical State: Semisolid gel **Color:** Lt. Olive Green **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** <600 (316)
Melting Point °F (°C): 430 (221) **Flash Point (COC) °F (°C):** 430 (221) **Autoignition Temperature °F (°C):** >500 (260)
Explosive Properties: LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A
Vapor Pressure (kPa): <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 0.98 **Flammability:** Not flammable at ambient temperature.
OAR Value: N/A **Oxidizing Properties:** None **Water Solubility:** Slight, not readily soluble **Vapor Density:** >5

Stability: Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temperatures. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

Acute Toxicity: Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known.
Subacute/Sub-chronic Toxicity: Not known. **Genotoxicity:** None known. **Chronic Toxicity:** None known.
California Prop 65: N/A **Carcinogen:** NTP: No **IARC:** No **OSHA:** No **EC Classification (67/548/EEC):** No
LC-50: >2000mg/kg-extrapolated from component data. **LD-50:** Not applicable **Allergens:** None known.


Possible Effects: In extreme cases, may generate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly unlikely. **Behavior:** Relatively well behaved. Bioaccumulation potential nil. **Environmental Fate:** Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice. **Container Disposal:** Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. Liner—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous
Sea Transport (IMO & IMDG): Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

Labeling Information: None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.
S Phrases: None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.
WHMIS (Canada): Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A
CERCLA: Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: 
Prepared by: Donald A. Oldiges
Date Issued: June 9, 2008

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LEGEND	
I.	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
VII.	HANDLING AND STORAGE
VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	N/A

NFPA SYMBOL

