KOPR-KOTE * HIGH-TEMPERATURE ANTI-SEIZE

DESCRIPTION

KOPR-KOTE® is a low-friction, anti-seize lubricant Thickener manufactured from a combination of micro-size copper flakes and graphite dispersed in a water-resistant grease and fortified with antioxidants, plus rust and corrosion inhibitors. **KOPR-KOTE** provides protection unequalled by competitive brands.

KOPR-KOTE provides a shield against metal-to-metal Flash Point (ASTM D-92) contact, preventing seizure and corrosion. It fills irregularities and imperfections and resists welding, hardening, or setting. **KOPR-KOTE** provides low friction and cushions impact and shock loads. Low shear between particles reduces stick-slip, allowing quick disassembly with minimum wrench torque. It will not squeeze out of the threads, gum up, or wash off.

- Not classified as marine pollutant DOT Approval CA2004080025
- NSF Registered H2 (No. 120923)*
- · Conforms to MIL-PRF-907E
- Service rating: -65°F (-54°C) to 1800°F (982°C).
- · Contains no lead or zinc.
- · Lowers friction; reduces wrench torque.
- Permits reuse of fittings; saves stud, bolt, and nut replacement.
- Aluminum complex base for brushability and stability over a wide temperature range.
- Not affected by contraction, expansion, or vibration.
- · Will not run, drip, or settle out.
- Available in convenient aerosol form.

APPLICATIONS

KOPR-KOTE is ideal for use on threaded connections. pump housings, flanges, studs, exhaust manifold bolts, compressor heads, autoclaves, lathe centers, etc.

* Aerosol package is not NSF Registered

PRODUCT CHARACTERISTICS

Aluminum Complex Fluid Type Petroleum Dropping Point (ASTM D-566) 450°F (232°C) Specific Gravity 1.15 Density (lb/gal) 9.6

<3.0

Oil Separation (ASTM D-6184) WT. % Loss @ 212°F (100°C)

>450°F (232°C)

K-Factor 1" B7 Studs @ 80,000 psi Contact Stress Penetration @ 77°F (ASTM D-217) 310 - 330 Copper Strip Corrosion

(ASTM D-4048) 4-Ball (ASTM D-2596)

Weld Point, kgf 800 125 Load Wear Index

PACKAGING

Code No.	Container Size	Container				
10055	⅓ lb.	Brush Top can				
10002	½ lb.	Brush Top can				
10004	1 lb.	Brush Top can				
10007	2 lb.	Plug Top can				
10041	12 oz.	Aerosol				
See Aerosol Product Bulletin/MSDS						
10050	14 oz.	Cartridge				
10091	1 gal.	Pail				
10092	2½ gal.	Pail				
10093	5 gal.	Pail				

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 dam-

CORPORATE LOCATIONS

Houston, Texas-World Headquarters

Maidenhead, England

Edmonton, Canada

JET-LUBE, INC. 4849 HOMESTEAD RD., P.O. BOX 21258 (77226-1258) HOUSTON, TX 77028

WATS: 800-538-5823 PHONE: 713-674-7617 FAX: 713-678-4604 E-MAIL: sales@jetlube.com www.jetlube.com

JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: KOPR-KOTE®

Chemical Family: Petroleum based lubricating grease

Tool joint and drill collar compound/anti-seize (MIL-PRF-907E)/ <u>Use:</u>

jacking lubricant

Manufacturer/Supplier: JET-LUBE, INC. Address: 4849 Homestead Rd., Ste. #200

Houston, TX, 77028 USA Phone: 713-674-7617

Emergency Phone: 713-674-7617 Fax: 713-678-4604

Chemtrec 24 hours (USA): 800-424-9300

CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
74868219	60	N/A	N/A	STEL:
7782435/1317335	20-30	UN	UN	STEL: UN
13776744/471341				STEL: UN
7440508	10	N/A	1mg/M ³	STEL: 2mg/M ³
	74868219 7782435/1317335 13776744/471341	74868219 60 7782435/1317335 20-30 13776744/471341	74868219 60 N/A 7782435/1317335 20-30 UN 13776744/471341	74868219 60 N/A N/A 7782435/1317335 20-30 UN UN UN 13776744/471341

Main Hazards-Health Effects

Eyes: May cause irritation. Inhalation: Viscous nature may block breathing passages if inhaled. Ingestion: May cause diarrhea.

Skin: For hypersensitive persons, may irritate the skin after prolonged periods of contact.

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: Wash out mouth immediately. 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 paste **Color:** Copper/Bronze Odor: Petroleum pH: Neutral Boiling Range/Point °F (°C): <600 (316) Melting Point °F (°C): 500 (260) 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 Percent Volatiles: Nil **Density (a/cm³):** 1.15 **Flammability:** Not flammable at ambient temperature. OAR Value: N/A Oxidizing Properties: None Vapor Density: >5 Water Solubility: Nil

Stability: Chemically stable under normal conditions. No photoreactive agents. Conditions to Avoid: Powerful sources of ignition & extreme temps. Materials to Avoid: Strong inorganic & organic acids, oxidizing & copper reactive agents. Hazardous Decomposition Products: Burning generates smoke, airborne soot, hydrocarbons & 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 Allergens: None known. LC-50: 1.98gm/l—actual test data - mysidopsis bahia.

Possible Effects: In extreme cases, may gernerate oil fractions that could act as a marine pollutant. Occurrences of this nature are highly 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.

D.O.T.: Nonhazardous D.O.T. exception CA2004080025 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: N/A, as known. Ozone Depleting Chemicals: N/A TSCA: All components are listed. TSCA 12B Components: None WHMIS (Canada): Not controlled. Canadian DSL: All components listed. 40 CFR Part 372 (SARA Section 313): This product contains in part raw material components subject to reporting. SARA 311/312: None **CERCLA:** Nonhazardous RCRA Hazard Class: Nonhazardous

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

Signature: Prepared by: Donald A. Oldiges Date Issued: October 27, 2008

As of issue date, the information contained herein is accurate and reliable to the best of **JET-LUBE'S** knowledge. **JET-LUBE®** does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use

LEGEND

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY IX. PHYSICAL AND CHEMICAL PROPERTIE

COMPOSITION INFORMATION ON INGREDIENTS

HAZARDS IDENTIFICATION

FIRST AID MEASURES FIRE FIGHTING MEASURES

VI ACCIDENTAL RELEASE MEASURES

VII. HANDLING AND STORAGE

EXPOSURE CONTROL/PERSONAL PROTECTION

X. STABILITY AND REACTIVITY

XI. TOXICOLOGICAL INFORMATION

ECOLOGICAL INFORMATION

XIII. WASTE DISPOSAL

XIV TRANSPORT INFORMATION

XV. REGULATORY INFORMATION OTHER INFORMATION

NFPA SYMBOL

HMIS SYMBOL

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HEALTH FI AMMABII ITY

REACTIVITY