

KOL'R-KING[®]

DRILL COLLAR COMPOUND

DESCRIPTION

KOL'R-KING[®] Drill Collar Compound contains 60% pure metallic lead, rust and corrosion inhibitors, plus special proprietary binders to reduce lead buildup and minimize the need for wire brushing on breakout. The premium quality metallic lead in **KOL'R-KING** meets or exceeds the lead specifications listed in the First Appendix of API Recommended Practice 5A3.

KOL'R-KING is a result of laboratory and field development efforts spanning several decades. It is manufactured under the industry's toughest quality control regimen (ISO-9001) and is especially designed to prevent thread and shoulder wear and to provide superior performance on the rig floor and downhole.

- Contains 60% pure metallic lead
- Sticks to wet joints
- Brushable over a wide temperature range
- Consistent rig floor makeup
- Resistance to downhole makeup
- Available in Arctic grade
- Oxidation, rust, & corrosion inhibited
- California Proposition 65: Carcinogen & reproductive toxin

APPLICATIONS

KOL'R-KING Drill Collar Compound is designed to provide maximum protection of drill collar threads and shoulders over a wide variety of conditions. The premium quality metallic lead forms a gasket-like shield on threads and shoulders and acts as a cushion, preventing direct metal-to-metal contact, and protects against damage from galling or seizure caused by extreme shock loads on drill collars. The high volume of solids also allows **KOL'R-KING** to be used as a pipe thread sealant and as an anti-seize thread compound.

PRODUCT CHARACTERISTICS

Thickener	Soap
Fluid Type	Petroleum
Dropping Point (ASTM D-2265)	>280°F (138°C)
Specific Gravity	2.46
Density (lb/gal)	19.8
Oil Separation (ASTM D-6184)	<3.0
Wt. % Loss @ 212°F (100°C)	
Flash Point (ASTM D-92)	>430°F (221°C)
NLGI Grade	1½ - 2
Penetration @77°F (ASTM D-217)	300 - 330
Copper Strip Corrosion (ASTM D-4048)	1
4-Ball (ASTM D-2596)	
Weld Point, kgf	800
Friction Factor (API RP 7G)	1.0
Service Temperature	-0°F (-18°C) to 300°F (149°C)

Shelf Life: Minimum 2 years from manufacture date.

PACKAGING

Code No.	Container Size	Shipping Wt.
26523	20 lb.	21 lbs.
26513	50 lb.	53 lbs.

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

Houston, Texas—World Headquarters

Maidenhead, England

Edmonton, Canada



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MATERIAL SAFETY DATA SHEET

Product Name: KOL'R-KING®
Chemical Family: Petroleum based lubricating grease.
Use: Drill collar compound/anti-seize (MIL-PRF-907E)

Manufacturer/Supplier: JET-LUBE, INC.
Address: 4849 Homestead Rd., Ste. #232
 Houston, TX, 77028 USA **Phone:** 713-670-5700
Emergency Phone: 713-670-5700 **Fax:** 713-678-4604
Chemtrec 24 hours (USA): 800-424-9300
Outside the USA: 703-527-3887

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
Petroleum oil	64742525/64742014	30-60	Oil mist TWA-5mg/M ³	N/A	STEL: 10mg/M ³
Nonhazardous Blend	82980549/3159624 7620771/7782425 471341/12001262	10-20	UN	UN	STEL: UN
Metallic Lead	7439921	30-60	N/A	1mg/M ³	STEL: 450mg/M ³

Main Hazards—Health Effects

Eyes: May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea, anemia and birth defects. **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 about method involving metallic lead. **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. Consult hazardous waste regulations. **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:** Black **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** >525 (274)
Melting Point °F (°C): >280 (138) **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 (g/cm³):** 2.46 **Flammability:** Not flammable at ambient temperature.
OAR Value: N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

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

Acute Toxicity: Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** UN **Subacute/Sub-chronic Toxicity:** UN **LD-50:** N/A
Genotoxicity: Yes, lead. **Chronic Toxicity:** May result in birth defects, anemia, weight loss & impaired motor functions. **LC-50:** UN, presumed toxic. **California Prop 65:** Reproductive toxin & carcinogen. **Carcinogen:** NTP: No **IARC:** Probable **OSHA:** No **EC Class (67/548/EEC):** No

Possible Effects: May generate oil fractions and lead that could act as a marine pollutant. **Behavior:** Bioaccumulation potential of metallic lead is minimal. **Environmental Fate:** Highly unlikely to cause notable contamination. May be toxic to marine or land organisms. More dense than water with limited solubility or mobility.


Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice. EPA Waste Code D008.

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:** N/A **R Phrases:** R22—harmful if swallowed, R33—danger of cumulative effects. **S Phrases:** S41—burning may evolve toxic fumes. **Ozone Depleting Chemicals:** N/A **CERCLA:** Nonhazardous
TSCA: All components are listed. **WHMIS (Canada):** D2A **Canadian DSL:** All components listed. **TSCA 12B Components:** Lead
40 CFR Part 372 (SARA Section 313): Contains lead **SARA 311/312 & RCRA Hazard Class:** Hazardous, contains lead.

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

Signature: 
Prepared by: Donald A. Oldiges
Date Issued: September 21, 2009

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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	1
PPI	B

NFPA SYMBOL

