



Conforms to Regulation (EC) No. 1907/2006 - United Kingdom (UK)

**SAFETY DATA SHEET**

**KOPR-KOTE**

Product classified as hazardous according to NOHSC classification

**1. Identification of the substance/preparation and of the company/undertaking**

Identification of the substance or preparation

**Product Name:** KOPR-KOTE  
**Use of the substance/preparation:** Lubricant grease (petroleum based)

Company/undertaking identification

**Manufacturer:** Jet-Lube, Inc.  
 4849 Homestead Rd., Suite 232  
 Houston, TX 77028  
 Email: [doldiges@jetlube.com](mailto:doldiges@jetlube.com)

**Australian Contact:** Xtex Pty. Ltd  
 ABN 40 121 722 236  
 80 Daly Street  
 Ascot, WA 6104 1300-00-9839 phone 0437-272-490 mobile

**Emergency telephone number:** NHS Direct in the UK  
 Emergency number: 0845 4647

**2. Hazards identification**

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification:** R50/53  
**Physical/chemical hazards:** Not applicable  
**Human health hazards:** Not applicable  
**Environmental hazards:** Very toxic to aquatic organisms.

See section 11 for more detailed information on health effects and symptoms.

**3. Composition /information on ingredients**

Substance/preparation: Preparation

Ingredient name	CAS Number	EC Number	%	Classification
Lubricating grease (synthetic base - see below)	74869-21-9	278-011-7	50 - 70	Not classified
graphite, natural	7782-42-5	231-95-3	10 - 15	Not classified
Calcium Carbonate	1317-65-3	215-279-6	5 - 10	Not classified
Copper	7440-50-8	231-159-6	5 - 10	N; R50/53
talc, not containing asbestiform fibers	14807-96-6	238-877-9	1 - 5	Not classified
potassium aluminum silicates	12001-26-2		1 - 5	Not classified
Molybdenum disulfide	1317-33-5	215-263-9	1 - 5	Not classified

**3a. Lubricating Grease Composition /information on ingredients**

Substance/preparation: Preparation

Ingredient name	CAS Number	EC Number	%	Classification
Naphthenic Distillates	64742-52-5	255-155-0	68-84	Not classified
Hydrotreated residual Oils	64742-57-0	265-101-6	10-20	Not classified
Aluminum, benzoate C16-18-fatty acid complex	94166-87-7	303-385-6	5-10	Not classified
polyisobutylene	9003-29-6	Polymer	1 -2	Not classified
<b>The Petroleum Oils and additives do not require carcinogenic listing.</b>				

**Eye contact:** No known significant effects or critical hazards.

First aid measures

**Inhalation:** Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Ingestion:** Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

## KOPR-KOTE

**Skin contact:** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

### 5. Fire-fighting measures

**Extinguishing media:** Use an extinguishing agent suitable for the surrounding fire.  
**Special exposures hazards:** No specific hazard.  
**Hazardous thermal decomposition products:** These products are carbon oxides (CO, CO<sub>2</sub>), sulphur oxides (SO<sub>2</sub>, SO<sub>3</sub>, etc.). Some metallic oxides.  
**Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### 6. Accidental release measures

**Personal precautions:** Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.  
**Environmental precautions:** Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.  
**Methods for cleaning up:** If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

### 7. Handling and storage

**Handling:** Wash thoroughly after handling.  
**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.  
**Packaging materials**  
**Recommended:** Use original container.  
**Specific uses:** Not available.

### 8. Exposure controls/personal protection

<b>Ingredient Name:</b>	<b>Occupational exposure limits</b>
Graphite, natural As dust	<b>EH40-WEL (United Kingdom (UK), 1/2005)</b> TWA: 10 mg/m <sup>3</sup> 8 hour/hours. Form: Inhalable fraction STEL: 4 mg/m <sup>3</sup> 15 minute. Form: Respirable fraction
Calcium carbonate As dust	<b>EH40-WEL (United Kingdom (UK), 9/2006)</b> TWA: 10 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. Form: Inhalable fraction STEL: 4 mg/m <sup>3</sup> 65534 times per shift, 15 minute/minutes. Form: Respirable fraction
Copper As dust	<b>EH40-WEL (United Kingdom (UK), 9/2006). Notes: As Cu</b> TWA: 1 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. STEL: 2 mg/m <sup>3</sup> 65534 times per shift, 15 minute/minutes
Talc As dust	<b>EH40-WEL (United Kingdom (UK), 9/2006)</b> TWA: 1 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. Form: Respirable fraction
Mica As dust	<b>EH40-WEL (United Kingdom (UK), 9/2006)</b> TWA: 10 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. Form: Inhalable fraction TWA: 0,8 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. Form: Respirable fraction
Molybdenum disulphide As Dust	<b>EH40-WEL (United Kingdom (UK), 9/2006). Notes: As Mo</b> TWA: 10 mg/m <sup>3</sup> 65534 times per shift, 8 hour/hours. STEL: 20 mg/m <sup>3</sup> 65534 times per shift, 15 minute/minutes

#### Exposure controls

**Occupational exposure controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection:** No respiratory equipment is required for normal use. In the case of extreme temperatures, a dry residue will result when the grease & oils burn off. Where workers may be exposed to the dust during removal of the film use of air-purifying respirators or dust masks is suggested.

**Hand protection:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Eye protection:** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

**Skin protection:** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### 9. Physical and chemical properties

**Physical state:** Liquid (gel)  
**Color:** Copper / bronze

## KOPR-KOTE

<b>Odor:</b>	Petroleum pungent
<b>pH:</b>	Neutral
<b>Boiling point:</b>	<316°C (600.8°F)
<b>Melting point:</b>	260°C (500°F)
<b>Flash point:</b>	Open cup: 221°C (429.8°F)
<b>Flammability (solid, gas):</b>	Not applicable
<b>Explosive properties:</b>	Not applicable
<b>Explosive limits:</b>	Lower: 0.9% Upper: 7%
<b>Oxidizing properties:</b>	Not available
<b>Vapor pressure:</b>	<0.01 kPa (<0.08 mm Hg) (at 20°C)
<b>Specific gravity:</b>	Not available
<b>Density:</b>	1.15 kg/m <sup>3</sup>
<b>Solubility:</b>	Insoluble in cold water, hot water
<b>Octanol/water partition coefficient:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Vapor density:</b>	>5 (Air = 1)
<b>Evaporation rate (butyl acetate = 1):</b>	<0.01 compared with Butyl acetate
<b>Auto-ignition temperature:</b>	>260°C (500°F)

### 10. Stability and reactivity

<b>Stability:</b>	The product is stable
<b>Conditions to avoid:</b>	Keep away from sources of ignition. Keep away from heat.
<b>Materials to avoid:</b>	Not available
<b>Hazardous Decomposition products:</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), sulfur oxides (SO <sub>2</sub> , SO <sub>3</sub> ), etc.). Some metallic oxides.
<b>Hazardous polymerization:</b>	Not available

### 11. Toxicological information

#### Potential acute health effects

<b>Inhalation:</b>	No known significant effects or critical hazards as high viscosity makes inhalation unlikely. No known significant effects or critical hazards as grease results in gastric distress negating bioaccumulation concerns.
<b>Ingestion:</b>	No known significant effects or critical hazards.
<b>Skin contact:</b>	No known significant effects or critical hazards.
<b>Eye contact:</b>	No known significant effects or critical hazards.

#### Potential chronic health effects

<b>Carcinogenicity:</b>	No known significant effects or critical hazards.
<b>Mutagenicity:</b>	No known significant effects or critical hazards.
<b>Reproductive toxicity:</b>	No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Inhalation:</b>	No known significant effects or critical hazards.
<b>Ingestion:</b>	No known significant effects or critical hazards.
<b>Skin:</b>	No known significant effects or critical hazards.
<b>Target organs:</b>	No known significant effects or critical hazards.
<b>Other adverse effects:</b>	Not available

### 12. Ecological information

#### Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
KOPR-KOTE	mysidopsis bahia (LC50)	96 hr/hrs	1980 mg/l
KOPR-KOTE	Acartia tonsa (EC50)	48 hr/hrs	>1000 mg/l
KOPR-KOTE	Skeletonema costatum (EC50)	72 hr/hrs	>1000 mg/l
KOPR-KOTE	Scaphthalmus maximus (EC50)	96 hr/hrs	>1500 mg/l
KOPR-KOTE	Corophium volutator (LC50)	10 days	1800 mg/l
Copper	Acartia tonsa (EC50)	48 hr/hrs	27 mg/l
	Skeletonema costatum (EC50)	72 hr/hrs	<1.0 mg/l
	Daphnia magna (EC50)	48 hr/hrs	0.055 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0094 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0103 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0278 mg/l
Graphite	Fish (LC50)	96 hr/hrs	>1800 mg/l
	Algae (EC50)	72 hr/hrs	>1000 mg/l
Lubricating grease, petroleum based	Fish (LC50)	96 hr/hrs	>1800 mg/l
	Algae (EC50) ,biomass	72 hr/hrs	641 mg/l
	Algae (EC50) ,growth rate	72 hr/hrs	>1000 mg/l

#### Other ecological information

##### Persistence/degradability:

<u>Ingredient name</u>	<u>BOD</u>	<u>COD</u>	<u>ThOD</u>
Lubricating grease, petroleum based	Not available	Not available	3.78 mg O <sub>2</sub> /mg

<u>Ingredient name</u>	<u>Aquatic half-life</u>	<u>Photolysis</u>	<u>Biodegradability</u>
Lubricating grease, petroleum based	Not available	Not available	6.2 % biodegradation in 28 days (BODIS)

## KOPR-KOTE

### Other ecological information

**Mobility:** Not available  
**Other adverse effects:** No known significant effects or critical hazards.

### 13. Disposal consideration

**Methods of disposal:** The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Hazardous waste:** This product is regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

### 14. Transport information

#### Hazchem code 1Z

#### International transport regulations

Regulatory information	UN Number	Proper shipping name	Class	Packing group	Label	Additional information
US Dept of Transportation	UN3077	Tool Joint Compound				Approval CA2004080025
ADR/RID Class	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Hazard ID No. 90
ADNR Class	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Hazard ID No. 90
IMDG Class	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Hazard ID No. 90
IATA-DGR Class	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Hazard ID No. 90
Canada TDG	UN3077	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Hazard ID No. 90
Australia ADG Code	UN3078	Environmentally hazardous substance, solid, n.o.s. (Copper)	9	III	9 Misc.	Reference SP-AU01

### 15. Regulatory information

**Poison Schedule** Not scheduled

**EU Regulations**

**Risk Phrases:** R50/53 - Very toxic to aquatic organisms.

**Safety Phrases:** S61 - Avoid release to the environment.

**Product use:** Classification and labeling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use. Industrial applications.

**Other EU regulations**

**Additional warning phrases:** Safety data sheet available for professional user on request.

**Restrictions on the marketing and use directive:** Not applicable.

**National regulations United Kingdom (UK)**

**COSHH:** The use of this chemical product must be in compliance with provisions included in COSHH (1999) and COSHH Essentials (1999).

---

**US Regulations:** **TSCA:** All components are listed. (See Section 3). **TSCA 12B Components:** None  
**SARA 313 (40 CFR Part 372):** Contains metallic copper **CERCLA:** Nonhazardous **RCRA Hazard class:** Nonhazardous  
**SARA 311/312:** NONE **OZONE DEPLETING CHEMICALS:** None  
**Canadian Regulations:** **DSL:** All components are listed. (See 3 and 3a) **WHMIS:** Not controlled.

### 16. Other information

**Full text of R phrases referred to in sections 2 and 3 - United Kingdom (UK):** R50 - Very toxic to aquatic organisms.

**Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK):** N - Dangerous for the environment.

#### History

**Date of printing:** 01-August 2010  
**Date of issue:** 01-August 2010  
**Date of previous issue:** No previous validation  
**Version:** 1

**Prepared by:**



**Name & Title**

Donald Oldiges, VP of Research & Development

**Notice to reader:**

## KOPR-KOTE

All practical steps have been taken to ensure this data sheet and the health, safety and environmental information contained in this document is accurate as of the date specified above. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet. You should not use the product other than for the stated application or applications without seeking advice from us. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations in the country of use. Jet-Lube is not responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use have the duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

If this material is printed, circulated, distributed or copied in any manner, it is not to be modified without prior written permission, and further, it is to include the wording of the above disclaimer.