SAFETY DATA SHEET

Issuing Date 03-Dec-2014 **Revision Date** 19-Feb-2015 **Revision Number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name **Jet-Lube® KOPR-KOTE® - Aerosol**

Other means of identification

Product Code(s) **10041**

UN-Number UN1950

Synonyms KOPR-KOTE® - Aerosol

Recommended use of the chemical and restrictions on use

Recommended Use Lubricants, Greases and Release Products

Uses advised against No information available

Supplier's details

Manufacturer Address
Jet-Lube, Inc.
4849 Homestead Rd.
Suite 232
Houston, Texas 77028
TEL: 713-670-5700 (7:00 a.m. - 5:00 p.m.)

Emergency telephone number

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Flammable aerosols	Category 1
Gases under pressure	Compressed gas

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word **Danger**

Hazard Statements
• May be harmful if swallowed
• Causes serious eye irritation
• May cause drowsiness or dizziness
•
• Extremely flammable aerosol
• Contains gas under pressure; may explode if heated

Appearance Copper, Bronze **Physical State** Aerosol, Semi-fluid (gel). **Odor** Petroleum

Precautionary Statements

Prevention
• Wash face, hands and any exposed skin thoroughly after handling.
• Wear eye/face protection.
• Avoid breathing dust/fume/gas/mist/vapors/spray.
• Use only outdoors or in a well-ventilated area.
• Keep away from heat/sparks/open flames/hot surfaces - No smoking.
• Do not spray on an open flame or other ignition source
• Pressurized container: Do not pierce or burn, even after use.

General Advice
• None

Eyes
• IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
• If eye irritation persists: Get medical advice/attention.

Inhalation
• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
• Call a POISON CENTER or doctor/physician if you feel unwell.

Storage
• Store in a well-ventilated place. Keep container tightly closed.
• Store locked up.
• Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Disposal
• Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information
Harmful to aquatic life with long lasting effects

13.6% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms KOPR-KOTE® - Aerosol

Chemical Name	CAS-No	Weight %	Trade secret

Petroleum gases	68476-85-7	20-25	*
Graphite	7782-42-5	5-10	*
Copper	7440-50-8	5-10	*
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	3-5	*
Talc	14807-96-6	2-5	*
Limestone	1317-65-3	2-5	*
Molybdenum (IV) sulfide	1317-33-5	1-2	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice Immediate medical attention is not required. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician. In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Ingestion Not an expected route of exposure. Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary

Protection of First-aiders Remove all sources of ignition. Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Drowsiness. Dizziness. Itching. Rashes.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition. Containers may explode when heated.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

Cool closed containers exposed to fire with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Contents under pressure. Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions

Environmental Precautions Do not flush into surface water or sanitary sewer system. Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapors or spray mist. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep away from direct sunlight. Store in accordance with local regulations.

Incompatible Products Strong acids. Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Petroleum gases 68476-85-7	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³	IDLH: 2000 ppm TWA: 1000 ppm TWA: 1800 mg/m³
Graphite 7782-42-5	-	TWA: 15 mg/m³ total dust synthetic TWA: 5 mg/m³ total dust synthetic (vacated) TWA: 2.5 mg/m³ respirable dust natural (vacated) TWA: 10 mg/m³ total dust synthetic (vacated) TWA: 5 mg/m³ respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m³ TWA: 2.5 mg/m³ respirable dust
Copper 7440-50-8	TWA: 0.2 mg/m³ fume	TWA: 0.1 mg/m³ fume TWA: 1 mg/m³ dust and mist (vacated) TWA: 0.1 mg/m³ Cu dust, fume, mist	IDLH: 100 mg/m³ dust, fume and mist TWA: 1 mg/m³ dust and mist TWA: 0.1 mg/m³ fume
Talc 14807-96-6	TWA: 2 mg/m³	(vacated) TWA: 2 mg/m³	IDLH: 1000 mg/m³ containg no asbestos and <1% quartz TWA: 2 mg/m³
Limestone 1317-65-3	-	TWA: 15 mg/m³ TWA: 5 mg/m³ (vacated) TWA: 15 mg/m³ (vacated) TWA: 5 mg/m³	TWA: 5 mg/m³ respirable dust TWA: 10 mg/m³ total dust

Molybdenum (IV) sulfide 1317-33-5	TWA: 10 mg/m³ Mo inhalable fraction TWA: 3 mg/m³ Mo respirable fraction	TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ Mo	IDLH: 5000 mg/m³ Mo

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur, wear: Safety glasses with side-shields.
Skin and Body Protection Long sleeved clothing. Protective gloves.
Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In the case of dust or aerosol formation use respirator with an approved filter

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Aerosol, Semi-fluid (gel)
Odor Petroleum
Appearance Copper, Bronze
Odor Threshold No information available

Property	Values	Remarks/ - Method
pH	Neutral	None known
Melting Point/Range	> 260 °C	None known
Boiling Point/Boiling Range	< 316 °C	None known
Flash Point	> 75 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Specific Gravity	0.881	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	Largely.	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) No data available
VOC (g/l) 264

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks. Keep away from direct sunlight. Incompatible products.

Incompatible materials

Strong acids. Oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Vapors may irritate throat and respiratory system. May cause drowsiness and dizziness.
Eye Contact	Irritating to eyes. Causes serious eye irritation.
Skin Contact	Repeated exposure may cause skin dryness or cracking.
Ingestion	Not an expected route of exposure. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Solvent naphtha (petroleum), medium aliphatic	> 5000 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	> 5.28 mg/L (Rat) 4 h
Molybdenum (IV) sulfide	-	-	> 2820 mg/m³ (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	Contains no ingredients above reportable quantities listed as a carcinogen.

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration Hazard	No information available.

Numerical measures of toxicity - Product

Acute Toxicity 13.6% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 3775 mg/kg; Acute toxicity estimate

LD50 Dermal 51840 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Copper 7440-50-8	EC50 96 h: 0.031 - 0.054 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: 0.0426 - 0.0535 mg/L static (Pseudokirchneriella subcapitata)	LC50 96 h: 0.0068 - 0.0156 mg/L (Pimephales promelas) LC50 96 h: < 0.3 mg/L static (Pimephales promelas) LC50 96 h: = 0.052 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 0.112 mg/L flow-through (Poecilia reticulata) LC50 96 h: = 0.2 mg/L flow-through (Pimephales promelas) LC50 96 h: = 0.3 mg/L semi-static (Cyprinus carpio) LC50 96 h: = 0.8 mg/L static (Cyprinus carpio) LC50 96 h: = 1.25 mg/L static (Lepomis macrochirus)	-	EC50 48 h: = 0.03 mg/L Static (Daphnia magna)
Solvent naphtha (petroleum), medium aliphatic 64742-88-7	EC50 96 h: = 450 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: = 800 mg/L static (Pimephales promelas)		EC50 48 h: > 100 mg/L (Daphnia magna)
Talc 14807-96-6		LC50 96 h: > 100 g/L semi-static (Brachydanio rerio)		

Persistence and Degradability No information available.

Bioaccumulation

Chemical Name	Log Pow
Petroleum gases	2.8

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with federal, state, and local regulations

Contaminated Packaging Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Petroleum gases - 68476-85-7			D001	

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Copper	Toxic

14. TRANSPORT INFORMATION

DOT

UN-Number UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Description UN1950, Aerosols, 2.1

Emergency Response Guide Number	126

TDG

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	UN1950, Aerosols, 2.1

MEX

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	UN1950, Aerosols, 2.1

ICAO

UN-Number	UN1950
Proper shipping name	Aerosols
Hazard Class	2.1
Description	UN1950, Aerosols, 2.1

IATA

UN-Number	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
ERG Code	10L
Description	UN1950, Aerosols, flammable, 2.1

IMDG/IMO

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2
Subsidiary Class	See SP63
EmS No.	F-D, S-U
Description	UN1950, Aerosols, 2.1 (See SP63)

RID

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2
Classification Code	5F
Description	UN1950, Aerosols, 2.1

ADR

UN-Number	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2
Classification Code	5F
Tunnel Restriction Code	(D)
Description	UN1950, Aerosols, 2.1, (D)

ADN

Proper Shipping Name	Aerosols
Hazard Class	2
Classification Code	5F
Special Provisions	190, 327, 344, 625
Description	UN1950, Aerosols, 2.1
Limited Quantity	1 L
Ventilation	VE01, VE04

15. REGULATORY INFORMATION

International Inventories

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Copper	7440-50-8	5-10	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper		X	X	

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Petroleum gases	X	X	X		X
Graphite	X	X	X		X
Copper	X	X	X	X	X
Solvent naphtha (petroleum), medium aliphatic	X				
Talc	X	X	X		X
Limestone	X	X	X		X

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	**Health Hazard** 2	**Flammability** 4	**Instability** 0	**Physical and Chemical Hazards** -
HMIS	**Health Hazard** 2	**Flammability** 4	**Physical Hazard** 0	**Personal Protection** X

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet