SAFETY DATA SHEET

Issuing Date 21-Oct-2014

Revision Date 21-Oct-2014

Revision Number 0

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

GHS product identifier

Product Name

ROBROY COPPER ANTI-SEIZE

Other means of identification

Product Code(s)

62604

Synonyms

None

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

CHEMTREC: +1-703-527-3887 (INTERNATIONAL)

Number

1-800-424-9300 (NORTH AMERICA)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word

None

The product contains no substances which at their given concentration are considered to be hazardous to health

Appearance Copper, Bronze

Physical State Semi-solid (gel).

Odor Petroleum like

Precautionary Statements

Prevention

None

General Advice

None

Storage

None

Disposal

None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

23% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	74869-21-9	65-75	*
Limestone	1317-65-3	5 -10	*
Talc	14807-96-6	5 -10	*
Mica	12001-26-2	1-5	*
Copper	7440-50-8	2-8	*

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

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes.

Inhalation Move to fresh air.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting

without medical advice.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

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

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO2). Foam. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Burning produces obnoxious and toxic fumes. Heavy metal compounds

Explosion Data

Sensitivity to Mechanical Impact Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Use personal protective equipment.

Environmental Precautions

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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

Dam 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

Wear personal protective equipment. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed in a dry and well-ventilated place. Keep in a bunded area

Incompatible Products

Strong oxidizing agents. Acetylene. Vinyl compounds.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Limestone	120	TWA: 15	TWA: 5 mg/m³ respirable dust
1317-65-3		mg/m³	TWA: 10 mg/m³ total dust
		TWA: 5 mg/m³ (vacated)	
		TWA: 15 mg/m ³	
Talc	TWA: 2 mg/m ³	TWA: 20 mppcf (<1%	IDLH: 1500 mg/m₃ containing
14807-96-6		Crystalline silica)	<1% quartz
		3 mg/m ₃ (vacated)	TWA: 3 mg/m₃ respirable dust
Copper	TWA: 0.2 mg/m ³ fume	TWA: 0.1 mg/m3 fume TWA:	IDLH: 100 mg/m3 dust, fume and
7440-50-8		1 mg/m³ dust and mist	mist
		(vacated) TWA: 0.1 mg/m ³	TWA: 1 mg/m ³ dust and mist
		Cu dust, fume, mist	TWA: 0.1 mg/m³ fume

Mica 12001-26-2	TWA: 3 mg/m₃	TWA: 20 mppcf (<1% crystalline silica) 3 mg/m₃ (vacated)	IDLH: 1500 mg/m₃containing <1% quartz TWA: 3 mg/m₃respirable dust
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ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir. 1992).

Appropriate engineering controls

Engineering Measures

Showers

Eyewash stations Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection Safety glasses with side-shields.

Protective gloves. Long sleeved clothing.

Respiratory Protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should

Hygiene Measures

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before

re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Odor	Semi-solid (gel) Petroleum like	Appearance Odor Threshold	Copper, Bronze No information available
Property pH Melting Point/Range	<u>Values</u> Neutral > 232 °C	Remarks/ - None known None known	<u>Method</u>
Boiling Point/Boiling Range Flash Point	> 260 °C > 221 °C	None known None known	
Evaporation rate Flammability (solid, gas)	No data available No data available	None known None known	
Flammability Limits in Air upper flammability limit	No data available		
lower flammability limit Vapor Pressure Vapor Density	No data available No data available No data available	None known None known	
Specific Gravity Water Solubility	1.09 Insoluble in water.	None known None known None known	
Solubility in other solvents Partition coefficient: n-octano	Largely.	None known None known	
Autoignition Temperature Decomposition Temperature	No data available No data available	None known None known	
Viscosity Flammable Properties	No data available Not flammable	None known	
Explosive Properties Oxidizing Properties	No data available No data available		
Other information			
VOC Content (%) VOC (g/I)	No data available None		

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

Incompatible products.

Incompatible materials

Strong oxidizing agents. Acetylene. Vinyl compounds.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Eye Contact Skin Contact None known. None known. None known.

Ingestion Not an e

Not an expected route of exposure. May be harmful if swallowed. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating greases	= 2280 mg/kg (Rat)	ner	16:
A complex combination of			
hydrocarbons having carbon			
numbers predominantly in the range			
of C12 through C50, may contain	The state of the s		
organic salts of alkali metals,	1		
alkaline earth metals, etc.			

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
STOT - single exposure
STOT - repeated exposure
No information available.
No information available.
No information available.

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Aspiration Hazard

No information available.

Numerical measures of toxicity - Product

Acute Toxicity

23% 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

2372 mg/kg; Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic toxicity is unlikely due to low solubility. Based on available data, the classification criteria are not met Lc50/48h/Acartia tonsa = >1000 mg/L EC50/72h/Skeletonema costatum = >1000 mg/L LC50/96h/Scophthalmus maximus = >1000 mg/L

Sea sediment LC50/10d/Corophium sp. = 925 - 3502 mg/kg

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in	>1001 mg/l	LC50 96 h: > 2000 mg/L (Salmo gairdneri)		
the range of C12 through C50, may contain organic salts of alkali metals, alkaline earth metals, etc. 74869-21-9				
Copper 7440-50-8		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: = 1.25 mg/L static (Lepomis macrochirus)		EC50 48 h: = 0.03 mg/L Static (Daphnia magna)

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with local regulations. Where possible recycling is preferred to

disposal or incineration.

Contaminated Packaging

Do not re-use empty containers.

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

Not regulated

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	3	1.0
SARA 311/312 Hazard Categories		5	
Acute Health Hazard	No		
Chronic Health Hazard	No		
Fire Hazard	No		
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):

Che	emical 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	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
Limestone	X	X	X		X
Talc	X	X	X		X
Copper	X	X	X	Х	X
Mica	X	X	X		X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA_

Health Hazard 1

Flammability 1

Instability 0

Physical and Chemical

Hazards -

HMIS

Health Hazard 1

Flammability 1

Physical Hazard 0

Personal Protection X

Prepared By

Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501 21-Oct-2014

Issuing Date Revision Date Revision Note

21-Oct-2014 Initial Release.

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