



SAFETY DATA SHEET

Issuing Date 04-Jun-2014

Revision Date 04-Jun-2014

Revision Number 0

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s) 110
Product Name Jet-Lube 21®

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Lubricants, Greases and Release Products
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Importer	Company
Jet-Lube (UK) Ltd	Jet-Lube, Inc.
Jet-Lube House	4849 Homestead Rd.
Reform Road	Suite 232
Maidenhead	Houston, Texas 77028
Berkshire UK	TEL: 713-670-5700 (7:00 a.m. - 5 p.m.)
SL6 8BY	
TEL: 44 1628-631913 (8:00 a.m. - 5:00 p.m.)	

For further information, please contact

E-mail Address doldiges@jetlube.com

1.4. Emergency telephone number

Emergency Telephone Number CHEMTREC: 703-741-5500

Europe	112
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Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

Physical Hazards

None

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16

The preparation is non-dangerous in accordance with Directive 1999/45/EC

Symbol(s) Not dangerous

2.2. Label Elements

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008

Signal Word None

2.3. Other information

None known

Section 3. Composition/information on ingredients**3.1. Substances**

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
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.	278-011-7	74869-21-9	65-75	-	-	No data available
Copper	231-159-6	7440-50-8	2-8	Xi;R36/37/38 N;R50-53	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available

For the full text of the R-phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

Note

The full refining history is known for this product and it can be shown that the substance from which it is produced is not a carcinogen. This note applies only to certain complex oil derived substances in Annex I.

Section 4. First aid measures**4.1. Description of 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.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air.

4.2. Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Section 5. Fire-fighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media

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

Extinguishing media which must not be used for safety reasons

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

5.2. Special hazards arising from the substance or mixture**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**

Burning produces obnoxious and toxic fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Metal oxides.

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.

6.2. 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.

6.3. Methods and materials for containment and cleaning up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

6.4. Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage**7.1. Precautions for Safe Handling****Handling**

Wear personal protective equipment. Ensure adequate ventilation.

Hygiene Measures

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

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)**Exposure Scenario**

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Chemical Name	EU	The United Kingdom	France	Spain	Germany
Copper 7440-50-8		STEL: 0.6 mg/m ³ STEL: 2 mg/m ³ TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	VME: 0.2 mg/m ³ VME: 1 mg/m ³ VLCT: 2 mg/m ³	VLA-ED: 0.2 mg/m ³ VLA-ED: 1 mg/m ³	MAK: 0.1 mg/m ³ Ceiling / Peak: 0.2 mg/m ³
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Copper 7440-50-8		TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 1 mg/m ³ TWA: 0.1 mg/m ³	TWA: 1.0 mg/m ³ TWA: 0.1 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Copper 7440-50-8	STEL 4 mg/m ³ STEL 0.4 mg/m ³ MAK: 1 mg/m ³ MAK: 0.1 mg/m ³	STEL: 0.2 mg/m ³ MAK: 0.1 mg/m ³	NDS: 0.2 mg/m ³	TWA: 0.1 mg/m ³ TWA: 1 mg/m ³ STEL: 0.3 mg/m ³ STEL: 3 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³

Derived No Effect Level No information available
Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.
Personal protective equipment
Eye Protection Safety glasses with side-shields.
Skin and Body Protection Long sleeved clothing.
Hand Protection Protective gloves.
Respiratory Protection None required under normal usage. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls Local authorities should be advised if significant spillages cannot be contained. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Semi-solid (gel). **Appearance** Copper, Bronze
Odor Petroleum like.

Property	Values	Remarks/ - Method
pH	Neutral	None known
Melting Point/Range	> 232 °C	None known
Boiling Point/Boiling Range	> 260 °C	None known
Flash Point	> 221 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Vapor Pressure	No data available	None known
Vapor Density	No data available	None known
Relative Density	1.10	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	Largely	None known
Partition coefficient: n-octanol/water	No information available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%) None
 VOC (g/l) None
 Flammability Limits in Air No information available.

Section 10. Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Incompatible products.

10.5. Incompatible materials

Strong oxidizing agents. Acetylene. Vinyl compounds.

10.6. Hazardous decomposition products

None under normal use.

Section 11. Toxicological information

11.1.

Acute Toxicity

Product Information

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

Inhalation

None known.

Eye Contact

None known.

Skin Contact

None known.

Ingestion

Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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.	= 2280 mg/kg (Rat)		

Sensitization

None known.

Mutagenic Effects

None known.

Carcinogenic Effects

None known.

Reproductive Toxicity

None known.

Developmental Toxicity

None known.

STOT - single exposure

None known

STOT - repeated exposure

No information available.

Target Organ Effects

Central vascular system (CVS). Eyes. Kidney. Liver. Respiratory system. Skin.

Aspiration Hazard

Not applicable

Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects

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 the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	>1001 mg/l	LC50 96 h: > 2000 mg/L (Salmo gairdneri)		
Copper	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)
Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to aquatic invertebrates
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.	EC50 >1001 mg/l	LC50 >1000 mg/l		LC50 = 247.2 mg/l

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential.

No information available.

12.4. Mobility in soil

Adsorbs on soil.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods

Waste from Residues / Unused Products

Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other Information

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14. Transport information

IMDG/IMO

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

RID

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

ADR

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

ICAO

14.1. UN-Number	Not regulated.
14.2. Proper shipping name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

IATA

14.1. UN-Number	Not regulated.
14.2. Proper Shipping Name	Not regulated.
14.3. Hazard Class	Not regulated.
14.4. Packing Group	Not regulated.
Description	Not applicable.
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

WGK Classification not water endangering

International Inventories

The following inventory listing takes into account the breakdown of the Rare Earth substances used in this product, which are compounds composed of various fluoride and oxide substances.

TSCA	Not determined
EINECS/ELINCS	Complies
DSL/NDSL	Not determined
PICCS	Complies
ENCS	Not determined
IECSC	Complies
AICS	Not determined
KECL	Not determined

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Full text of R-phrases referred to under Sections 2 and 3

No information available

R36/37/38 - Irritating to eyes, respiratory system and skin

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Key literature references and sources for data

www.ChemADVISOR.com/

Issuing Date	04-Jun-2014
Revision Date	04-Jun-2014
Revision Note	Initial Release.

This safety data sheet complies with the requirements of Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No. 1907/2006

General Disclaimer

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End of Safety Data Sheet