SAFETY DATA SHEET

Issuing Date 04-Jun-2016 **Revision Date** 04-Jun-2016 **Revision Number** 1

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

1.1. Product identifier

Product Code(s)

Product Name **HDD AUTOLUBE™**

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

Jet-Lube (UK) Ltd
Jet-Lube House
Reform Road
Maidenhead
Berkshire UK
SL6 8BY
TEL: 44 1628-631913 (8:00 a.m. - 5:00 p.m.)

Company

Jet-Lube, Inc.
930 Whitmore Sr.
Rockwall, Texas 75087
TEL: 713-670-5700 (7:00 a.m. - 5 p.m.)

For further information, please contact

E-mail Address don.oldiges@jetlube.com

1.4. Emergency telephone number

Emergency Telephone Number CHEMTREC: 703-741-5500

Europe	112

Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

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 classified as dangerous in accordance with Directive 1999/45/EC.

Symbol(s) Not dangerous

2.2. Label Elements

Signal Word **Warning**

Hazard Statements
H303 - May be harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Precautionary Statements
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P321 - Specific treatment (see supplemental first aid instructions on this label)
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P362 - Take off contaminated clothing and wash before reuse
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/ attention
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other information
None known

Section 3. Composition/information on ingredients

3.1. Substances
3.2. Mixtures

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	50-70	-	-	No data available
Copper	231-159-6	7440-50-8	8-13	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 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.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Drink plenty of water. If symptoms persist, call a physician.

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

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 (CO_2). 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). Heavy metal compounds.

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
Do not allow material to contaminate ground water system. Prevent product from entering drains. See Section 12 for additional Ecological Information.

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 bunded 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/m³ STEL: 2 mg/m³ TWA: 0.2 mg/m³ TWA: 1 mg/m³	VME: 0.2 mg/m³ VME: 1 mg/m³ VLCT: 2 mg/m³	VLA-ED: 0.2 mg/m³ VLA-ED: 1 mg/m³	MAK: 0.1 mg/m³ Ceiling / Peak: 0.2 mg/m³
Chemical Name	**Italy**	**Portugal**	**The Netherlands**	**Finland**	**Denmark**
Copper 7440-50-8		TWA: 0.2 mg/m³ TWA: 1 mg/m³	TWA: 0.1 mg/m³	TWA: 1 mg/m³ TWA: 0.1 mg/m³	TWA: 1.0 mg/m³ TWA: 0.1 mg/m³
Chemical Name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
Copper 7440-50-8	STEL 4 mg/m³ STEL 0.4 mg/m³ MAK: 1 mg/m³ MAK: 0.1 mg/m³	STEL: 0.2 mg/m³ MAK: 0.1 mg/m³	NDS: 0.2 mg/m³	TWA: 0.1 mg/m³ TWA: 1 mg/m³ STEL: 0.3 mg/m³ STEL: 3 mg/m³	TWA: 0.2 mg/m³ TWA: 1 mg/m³ STEL: 2 mg/m³

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. Risk of contact: Goggles

Skin and Body Protection Impervious clothing.

Hand Protection Impervious gloves.

Respiratory Protection None required under normal usage. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

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-fluid (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	< 316 °C	None known
Flash Point	> 221 °C	Open cup
Evaporation rate	<0.01	None known
Flammability (solid, gas)	No data available	None known
Vapor Pressure	<0.01 kPa @ 20°C	None known
Vapor Density	>5 (air = 1)	None known
Relative Density	1.15	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	>260 °C / >500 °F	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

Inhalation None known.

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Ingestion 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 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 Contains no ingredients above reportable quantities listed as a carcinogen.

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 Water endangering class = 1

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 flouride 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
H303 - May be harmful if swallowed
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-2016
Revision Date	12-Oct-2016
Revision Note	1, Revised address & Logo.

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