



# SAFETY DATA SHEET

Issuing Date 10-May-2013

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Revision Number 0

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

### 1.1. Product identifier

**Product Code(s)** 60242  
**Product Name** JET-LUBE® PS TERMINAL  
**Synonyms** PS TERMINAL

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

**Recommended Use** Lubricants, Greases and Release Products, metal surface treatment product  
**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, TX 77379
Berkshire UK	TEL: 713-670-5700
SL6 8BY	
TEL: 44 1628-631913 (8:00 a.m. - 5:00 p.m.)	

### For further information, please contact

**E-mail Address** lab@jetlube.com

### 1.4. Emergency telephone number

**Emergency Telephone Number** +1 703-741-5500

<b>Europe</b>	112
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## Section 2. Hazards identification

### 2.1. - Classification of the substance or mixture

**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*

**Symbol(s)** Not dangerous  
**R-code(s)** R52-53

### 2.2. Label Elements

#### Indication of danger

Not dangerous

#### R-phrase(s)

No information available.

#### S-phrase(s)

No information available.

### 2.3. Other information

## Section 3. Composition/information on ingredients

**3.1. Substances**

Not applicable

**3.2. Mixtures**

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
3,3-Dichloro-1,1,1,2,2-pent afluoropropane (HCFC-225ca)	207-016-9	422-56-0	55-60	R52/53	Aquatic Chronic 3 (H412)	No data available
1,3-Dichloro-1,1,2,2,3-pent afluoropropane (HCFC-225cb)	208-076-9	507-55-1	55-60	-		No data available
Ethane, 2-chloro-1,1,1,2-tetrafluoro-	220-629-6	2837-89-0	30-35	-		No data available
Ethanol	200-578-6	64-17-5	5-10	F;R11	Flam. Liq. 2 (H225)	No data available
Propane, 2-(difluoromethoxymethyl)- 1,1,1,2,3,3,3-heptafluoro-	ELINCS: 422-270-2	163702-08-7	0-5	-		No data available
Butane, 1,1,1,2,2,3,3,4,4-nonafuor o-4-methoxy-	ELINCS: 422-270-2	163702-07-6	0-5	-		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

## Section 4. First aid measures

**4.1. Description of first-aid measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
<b>Skin Contact</b>	Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Do NOT induce vomiting. Consult a physician if necessary
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. 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** Keep victim warm and quiet.

## Section 5. Fire-fighting measures

**5.1. Extinguishing media****Suitable Extinguishing Media**Foam. Dry powder. Carbon dioxide (CO<sub>2</sub>). Dry sand.**Extinguishing media which must not be used for safety reasons**

High volume water jet

**5.2. Special hazards arising from the substance or mixture**

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases**  
 Ruptured cylinders may rocket.

**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. Stop leak if you can do it without risk. Do not puncture or burn containers.

Ventilate the area.

**6.2. Environmental precautions**

Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent product from entering drains.

**6.3. Methods and materials for containment and cleaning up**

Allow substance to evaporate. Dries residue free.

Allow to evaporate If possible, turn leaking containers so that gas escapes rather than liquid

**6.4. Reference to other sections**

See Section 12 for additional information.

**Section 7. Handling and storage**

**7.1. Precautions for Safe Handling**

**Handling**

No special handling precautions are necessary.

**Hygiene Measures**

When using, do not eat, drink or smoke.

**7.2. Conditions for safe storage, including any incompatibilities**

Do not store at elevated temperatures.

**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
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Ethanol 64-17-5	-	STEL: 3000 ppm STEL: 5760 mg/m <sup>3</sup> TWA: 1000 ppm TWA: 1920 mg/m <sup>3</sup>	VME: 1000 ppm VME: 1900 mg/m <sup>3</sup> VLCT: 5000 ppm VLCT: 9500 mg/m <sup>3</sup>	VLA-ED: 1000 ppm VLA-ED: 1910 mg/m <sup>3</sup>	MAK: 500 ppm MAK: 960 mg/m <sup>3</sup> Ceiling / Peak: 1000 ppm Ceiling / Peak: 1920 mg/m <sup>3</sup> TWA: 500 ppm TWA: 960 mg/m <sup>3</sup>
<b>Chemical Name</b>	<b>Italy</b>	<b>Portugal</b>	<b>The Netherlands</b>	<b>Finland</b>	<b>Denmark</b>
Ethanol 64-17-5	-	TWA: 1000 ppm	Skin STEL: 1900 mg/m <sup>3</sup> TWA: 260 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> STEL: 1300 ppm STEL: 2500 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
<b>Chemical Name</b>	<b>Austria</b>	<b>Switzerland</b>	<b>Poland</b>	<b>Norway</b>	<b>Ireland</b>
Ethanol 64-17-5	STEL 2000 ppm STEL 3800 mg/m <sup>3</sup> MAK: 1000 ppm MAK: 1900 mg/m <sup>3</sup>	STEL: 1000 ppm STEL: 1920 mg/m <sup>3</sup> MAK: 500 ppm MAK: 960 mg/m <sup>3</sup>	NDS: 1900 mg/m <sup>3</sup>	TWA: 500 ppm TWA: 950 mg/m <sup>3</sup> STEL: 625 ppm STEL: 1187.5 mg/m <sup>3</sup>	STEL: 1000 ppm

**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** Chemical resistant apron.  
**Hand Protection** Protective gloves.  
**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental Exposure Controls** No information available.

## Section 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Physical State** Liquid, Aerosol. **Appearance** Clear  
**Odor** Ether.

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
<b>pH</b>	Neutral	None known
<b>Melting Point/Range</b>	No data available	None known
<b>Boiling Point/Boiling Range</b>	> 74 °C / 165 °F	None known
<b>Flash Point</b>	No data available	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Vapor Pressure</b>	No data available	None known
<b>Vapor Density</b>	No data available	None known
<b>Relative Density</b>	No data available	None known
<b>Specific Gravity</b>	1.43	None known
<b>Water Solubility</b>	Slightly soluble	None known
<b>Solubility in other solvents</b>	Completely soluble	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Viscosity</b>	~1 (@ 40°C)	None known

**Explosive Properties** No information available  
**Oxidizing Properties** No information available

**9.2. Other information**

**VOC Content (%)** 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**

Heat, flames and sparks.

**10.5. Incompatible materials**

Aluminum. Strong inorganic acids. Strong organic acids. Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Burning generates smoke, airborne soot, hydrocarbons and halogenated gases that could be toxic or corrosive.

## Section 11. Toxicological information

**11.1.****Acute Toxicity****Product Information****Inhalation**

High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and death.

**Eye Contact**

Contact with eyes may cause irritation. Causes irritation and pain if splashed into eye.

**Skin Contact**

Prolonged skin contact may cause skin irritation.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Vomiting may aspirate into lungs and cause chemical pneumonia.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	= 7060 mg/kg ( Rat )	-	= 124.7 mg/L ( Rat ) 4 h

**Sensitization**

No information available.

**Mutagenic Effects**

No information available.

**Carcinogenic Effects**

No information available.

**Reproductive Toxicity**

No information available.

**Developmental Toxicity**

No information available.

**STOT - single exposure**

No information available.

**STOT - repeated exposure**

No information available.

**Target Organ Effects**

Blood. Central nervous system (CNS). Eyes. Liver. Reproductive system. Respiratory system. Skin.

**Aspiration Hazard**

No information available.

## Section 12. Ecological information

### 12.1. Toxicity

#### Ecotoxicity Effects

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Ethanol		LC50 96 h: 12.0 - 16.0 mL/L static (Oncorhynchus mykiss) LC50 96 h: > 100 mg/L static (Pimephales promelas) LC50 96 h: 13400 - 15100 mg/L flow-through (Pimephales promelas)	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	LC50 48 h: 9268 - 14221 mg/L (Daphnia magna) EC50 24 h: = 10800 mg/L (Daphnia magna) EC50 48 h: = 2 mg/L Static (Daphnia magna)

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential.

No information available.

Chemical Name	Log Pow
Ethanol	-0.32

### 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** Do not incinerate. Dispose of in accordance with all European and Local regulations.

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

## Section 14. Transport information

#### IMDG/IMO

14.1. UN-Number UN1950

14.2. Proper Shipping Name Aerosols

14.3. Hazard Class	2
Subsidiary Class	See SP63
14.4. Packing Group	Not regulated.
Description	UN1950, Aerosols, 2.2 (See SP63)
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
EmS No.	F-D, S-U
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	UN1950
14.2. Proper Shipping Name	Aerosols
14.3. Hazard Class	2
14.4. Packing Group	Not regulated.
Description	UN1950, Aerosols, 2.2
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	5A

**ADR**

14.1. UN-Number	UN1950
14.2. Proper Shipping Name	Aerosols
14.3. Hazard Class	2
ADR/RID-Labels	2.2
14.4. Packing Group	Not regulated.
Description	UN1950, Aerosols, 2.2, (E)
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	5A
Tunnel Restriction Code	(E)

**ICAO**

14.1. UN-Number	UN1950
14.2. Proper shipping name	Aerosols
14.3. Hazard Class	2.2
14.4. Packing Group	Not regulated.
Description	UN1950, Aerosols, 2.2
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

**IATA**

14.1. UN-Number	UN1950
14.2. Proper Shipping Name	Aerosols, non-flammable
14.3. Hazard Class	2.2
14.4. Packing Group	Not regulated.
Description	UN1950, Aerosols, non-flammable, 2.2
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
ERG Code	2L

<b>Section 15. Regulatory information</b>
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**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

TSCA	Complies
EINECS/ELINCS	-
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Complies
AICS	-
KECL	-

#### 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

R11 - Highly flammable

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

#### Key literature references and sources for data

[www.ChemADVISOR.com/](http://www.ChemADVISOR.com/)

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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