



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) 17941
Product Name GEAR GUARD™ (Aerosol form)
Synonyms JET-LUBE® GEAR GUARD™ (Aerosol form), OPEN GEAR LUBE
Contains Trichloroethylene

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

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
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1B
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3
Chronic Aquatic Toxicity	Category 3

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)

T - Toxic

R-code(s)

R10 - Carc. cat. 2;R45 - Muta. cat. 3;R68 - Xi;R36/38 - R67 - R52-53

2.2. Label Elements**Signal Word****Danger****Hazard Statements**

H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H336 - May cause drowsiness or dizziness
 H341 - Suspected of causing genetic defects
 H350 - May cause cancer
 H412 - Harmful to aquatic life with long lasting effects
 EUH210 - Safety data sheet available on request
 EUH066 - Repeated exposure may cause skin dryness or cracking

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
 P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P308 + P313 - IF exposed or concerned: Get medical advice/ attention
 P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
 P271 - Use only outdoors or in a well-ventilated area
 P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
 P312 - Call a POISON CENTER or doctor/ physician if you feel unwell
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P405 - Store locked up
 P273 - Avoid release to the environment
 P501 - Dispose of contents/ container to an approved waste disposal plant

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

Chemical Name	EC-No	CAS-No	Weight %	Classification	EU - GHS Substance Classification	REACH No.
Petroleum gases	270-704-2	68476-85-7	20-30	F;R11 Xi;R36 R66 R67	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319) (EUH066)	No data available

Trichloroethylene	Present	79-01-6	25-30	Xi; R36/38 Carc.Cat.2; R45 R52-53 R67 Muta.Cat.3; R68 PBT	Skin Irrit. 2 (H315) STOT SE 3 (H336) Muta. 2 (H341) Carc. 1B (H350) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)	No data available
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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

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If symptoms persist, call a physician.
Ingestion	Drink plenty of water. Do NOT induce vomiting. Consult a physician if necessary
Inhalation	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

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

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

May cause sensitization by skin contact. Ruptured cylinders may rocket.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire and/or explosion do not breathe fumes

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation.

6.2. Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways, and/ or groundwater.

6.3. Methods and materials for containment and cleaning up

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

Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Wear personal protective equipment.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place.

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
Petroleum gases 68476-85-7		STEL: 1250 ppm STEL: 2180 mg/m ³ TWA: 1000 ppm TWA: 1750 mg/m ³		VLA-ED: 1000 ppm	
Trichloroethylene 79-01-6		STEL: 150 ppm STEL: 820 mg/m ³ TWA: 100 ppm TWA: 550 mg/m ³ Skin	TWA: 75 ppm TWA: 405 mg/m ³ STEL: 200 ppm STEL: 1080 mg/m ³	TWA: 10 ppm	Skin
Chemical Name	Italy	Portugal	The Netherlands	Finland	Denmark
Petroleum gases 68476-85-7		TWA: 1000 ppm			
Trichloroethylene 79-01-6		STEL: 100 ppm TWA: 50 ppm		TWA: 10 ppm TWA: 50 mg/m ³ Skin	TWA: 10 ppm TWA: 55 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland

Petroleum gases 68476-85-7					TWA: 1000 ppm TWA: 1800 mg/m ³ STEL: 1250 ppm STEL: 2250 mg/m ³
Trichloroethylene 79-01-6		Skin STEL: 100 ppm STEL: 520 mg/m ³ TWA: 50 ppm TWA: 260 mg/m ³	STEL: 100 mg/m ³ TWA: 50 mg/m ³	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 20 ppm STEL: 75 mg/m ³	TWA: 10 ppm STEL: 25 ppm Skin

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Trichloroethylene 79-01-6			4 mg/L blood end of shift at end of workweek Free Trichloroethanol Non-specific (observed after the exposure to other substances) 300 mg/g creatinine urine end of shift at end of workweek Sum of Trichloroacetic acid and Trichloroethanol Non-specific (observed after the exposure to other substances) 100 mg/g creatinine urine end of workweek Trichloroacetic acid Non-specific (observed after the exposure to other substances)	15 mg/L urine end of workweek Trichloroacetic acid 1,l 0.5 mg/L blood end of workweek Trichloroethanol (without hydrolysis) 1,l	5 mg/L whole blood end of shift Trichloroethanol 5 mg/L whole blood end of several shifts Trichloroethanol for long-term exposures 100 mg/L urine end of shift Trichloroacetic acid 100 mg/L urine end of several shifts Trichloroacetic acid for long-term exposures
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Trichloroethylene 79-01-6	(ACGIH:) 15 mg/L urine end of shift at end of workweek Trichloroacetic acid Nonspecific (ACGIH:) 0.5 mg/L blood end of shift at end of workweek Trichloroethanol (without hydrolysis) Nonspecific (ACGIH:) blood end of shift at end of workweek Trichloroethylene Semi-quantitative (ACGIH:) end-exhaled air end of shift at end of workweek Trichloroethylene Semi-quantitative				
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Trichloroethylene 79-01-6		5 mg/g whole blood end of shift, and after several shifts (for long-term exposures) Trichloroethanol N 100 mg/L creatinine urine end of shift, and after several shifts (for long-term exposures) Trichloroacetic acid N			
Chemical Name	Romania	Slovakia	Latvia	Bulgaria	

Trichloroethylene 79-01-6	300 mg/g Creatinine urine end of work week Trichloroacetic acid + Trichloroethanol			
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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 When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental Exposure Controls No information available.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Semi-fluid (gel). **Appearance** Black
Odor Ethereal odor.

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	Neutral	None known
Melting Point/Range	Not applicable	None known
Boiling Point/Boiling Range	> 315 °C	None known
Flash Point	> 315 °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	1.23	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	No data available 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	>100 cSt @40°C	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%) No information available
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

No information available.

10.6. Hazardous decomposition products

None under normal use.

Section 11. Toxicological information**11.1.****Acute Toxicity****Product Information****Inhalation**

May cause irritation of respiratory tract. Vapors may cause drowsiness and dizziness.

Eye Contact

Causes serious eye irritation.

Skin Contact

Causes skin irritation.

Ingestion

May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trichloroethylene	= 4290 mg/kg (Rat)	> 20 g/kg (Rabbit)	= 8000 ppm (Rat) 4 h = 26300 ppm (Rat) 1 h

Sensitization

No information available.

Mutagenic Effects

Suspected of causing genetic defects.

Carcinogenic Effects

May cause cancer. The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	EU Annex I Carcinogen Information	UK
Trichloroethylene	Category 2	

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

Central nervous system (CNS). Central vascular system (CVS). Eyes. Heart. Kidney. Liver. 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)

Trichloroethylene	EC50 96 h: = 450 mg/L (Desmodesmus subspicatus) EC50 96 h: = 175 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 31.4 - 71.8 mg/L flow-through (Pimephales promelas) LC50 96 h: 39 - 54 mg/L static (Lepomis macrochirus)	EC50 = 0.81 mg/L 24 h EC50 = 115 mg/L 10 min EC50 = 190 mg/L 15 min EC50 = 235 mg/L 24 h EC50 = 410 mg/L 24 h EC50 = 975 mg/L 5 min	EC50 48 h: = 2.2 mg/L (Daphnia magna)
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12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential.

Chemical Name	Log Pow
Petroleum gases	2.8
Trichloroethylene	2.29

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	Dispose of in accordance 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	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

Section 15. Regulatory information

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

TSCA	-
EINECS/ELINCS	-
DSL/NDL	-
PICCS	-
ENCS	-

IECSC -
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/NDL - 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
R67 - Vapors may cause drowsiness and dizziness
R36 - Irritating to eyes
R45 - May cause cancer
R68 - Possible risk of irreversible effects
R10 - Flammable

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R36/38 - Irritating to eyes and skin

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

H225 - Highly flammable liquid and vapor
H336 - May cause drowsiness or dizziness
H319 - Causes serious eye irritation
H315 - Causes skin irritation
H341 - Suspected of causing genetic defects if inhaled
H350 - May cause cancer if swallowed
H412 - Harmful to aquatic life with long lasting effects
EUH066 - Repeated exposure may cause skin dryness or cracking
EUH210 - Safety data sheet available on request

Key literature references and sources for data

www.ChemADVISOR.com/

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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

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