



SAFETY DATA SHEET

Issuing Date 18-Dec-2014

Revision Date 18-Dec-2014

Revision Number 0

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

1.1. Product identifier

Product Code(s) 300

Product Name EASY- CLEAN® LIQUID

Synonyms JET-LUBE® EASY- CLEAN® LIQUID

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

Recommended Use Detergents, cleaners

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.
4849 Homestead Rd.
Suite 232
Houston, Texas 77028
TEL: 713-670-5700 (7:00 a.m. - 5 p.m.)

For further information, please contact

E-mail Address doldiges@jetlube.com

1.4. Emergency telephone number

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)
1-800-424-9300 (NORTH AMERICA)

Europe 112

Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Chronic Aquatic Toxicity	Category 3

Physical Hazards

None

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

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

Symbol(s) C - Corrosive

R-code(s) C;R34

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

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

H314 - Causes severe skin burns and eye damage
 H412 - Harmful to aquatic life with long lasting effects
 EUH210 - Safety data sheet available on request

Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower
 P363 - Wash contaminated clothing before reuse
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P310 - Immediately call a POISON CENTER or doctor/ physician

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.
Sodium N-(2-carboxyethyl)-N-(2-ethylhexyl)-.beta.-alaninate	305-318-6	94441-92-6	5-10	C;R41 Xi;R38	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	No data available
2-Butoxyethanol	Present	111-76-2	2-5	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Skin Irrit. 2 (H315) Acute Tox. 4 (H332) Eye Irrit. 2 (H319)	No data available
Sodium hydroxide	215-185-5	1310-73-2	2-5	C; R35	Skin Corr. 1A (H314)	No data available

Sodium metasilicate	Present	6834-92-0	2-5	C;R34 Xi;R37	Skin Corr. 1B (H314) STOT SE 3 (H335)	No data available
Tetrasodium EDTA	200-573-9	64-02-8	1-2	Xn; R22 Xi; R41	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	No data available
Alcohols, C12-15, ethoxylated	-	68131-39-5	1-2	Xi;R41 N;R50	Eye Dam. 1 (H318) Aquatic Acute 1 (H400)	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

General Advice	Immediate medical attention is required. Take off contaminated clothing and shoes immediately. Move victim to a safe isolated area
Eye Contact	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin Contact	Immediate medical attention is not required. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if symptoms occur.
Ingestion	Immediate medical attention is required. Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Most Important Symptoms/Effects Burning. Itching.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Activated charcoal mixture may be beneficial. Suspend 50 g activated charcoal in 400 mL water and mix well. Administer 5 mL/kg, or 350 mL for an average adult.

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

None.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

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. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Ensure adequate ventilation.

Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow material to contaminate ground water system.

6.3. Methods and materials for containment and cleaning up

Dike far ahead of liquid spill for later disposal.

Small spillage: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Large spillage: Dam up. Take up mechanically and collect in suitable container for disposal.

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. Wear personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Do not take internally. Wash thoroughly after handling.

Hygiene Measures

Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children. Metal containers must be lined.

Packaging materials to be avoided Metal.

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
2-Butoxyethanol 111-76-2	S* TWA 20 ppm TWA 98 mg/m ³ STEL 50 ppm STEL 246 mg/m ³	STEL: 50 ppm STEL: 246 mg/m ³ TWA: 25 ppm TWA: 123 mg/m ³ Skin	TWA: 10 ppm TWA: 49 mg/m ³ STEL: 50 ppm STEL: 246 mg/m ³	S* STEL: 50 ppm STEL: 245 mg/m ³ TWA: 20 ppm TWA: 98 mg/m ³	TWA: 10 ppm TWA: 49 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 98 mg/m ³ Skin
Sodium hydroxide 1310-73-2		STEL: 2 mg/m ³	TWA: 2 mg/m ³	STEL: 2 mg/m ³	
Component	Italy	Portugal	The Netherlands	Finland	Denmark
2-Butoxyethanol 111-76-2 (2-5)	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 246 mg/m ³ Skin	TWA: 20 ppm	Skin STEL: 246 mg/m ³ TWA: 100 mg/m ³	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 250 mg/m ³ Skin	TWA: 20 ppm TWA: 98 mg/m ³ Skin
Sodium hydroxide 1310-73-2 (2-5)		Ceiling: 2 mg/m ³		STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
2-Butoxyethanol 111-76-2	Skin STEL 40 ppm STEL 200 mg/m ³ TWA: 20 ppm TWA: 98 mg/m ³	Skin STEL: 20 ppm STEL: 98 mg/m ³ TWA: 10 ppm TWA: 49 mg/m ³	STEL: 200 mg/m ³ TWA: 98 mg/m ³ Skin	TWA: 10 ppm TWA: 50 mg/m ³ Skin STEL: 20 ppm STEL: 75 mg/m ³	TWA: 20 ppm TWA: 98 mg/m ³ STEL: 50 ppm STEL: 246 mg/m ³ Skin
Sodium hydroxide 1310-73-2	STEL 4 mg/m ³ TWA: 2 mg/m ³	STEL: 2 mg/m ³ TWA: 2 mg/m ³	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³

Biological occupational exposure limits

Chemical Name	European Union	United Kingdom	France	Spain	Germany
2-Butoxyethanol 111-76-2				200 mg/g Creatinine urine end of shift Butoxyacetic acid (with hydrolysis) 2,9	100 mg/L urine end of several shifts Butoxyacetic acid for long-term exposures
Component	Italy	Portugal	Netherlands	Finland	Denmark
2-Butoxyethanol 111-76-2 (2-5)	(ACGIH:) 200 mg/g Creatinine urine end of shift Butoxyacetic acid (with hydrolysis)				
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
2-Butoxyethanol 111-76-2		100 mg/L urine end of shift, and after several shifts (for long-term exposures) Butoxyacetic acid N 200 mg/L urine after several shifts (for long-term exposures) total Butoxy acetic acid			

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

8.2. Exposure controls

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location.
Ventilation systems.

Personal protective equipment

Eye Protection Tightly fitting safety goggles. If splashes are likely to occur, wear: Face-shield.

Skin and Body Protection Repeated or prolonged contact: Boots. Chemical resistant apron.

Hand Protection	Protective gloves. Butyl rubber Nitrile rubber. Neoprene. Polyvinylchloride. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Respiratory Protection	In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Recommended Filter type:	Respiratory protection complying with EN 141. P, White. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace
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	Liquid.	Appearance	Pink
Odor	cleaner.		

Property	Values	Remarks/ - Method
pH	12.5 - 13.5	None known
Melting Point/Range	> 0 °C	None known
Boiling Point/Boiling Range	> 100 °C	None known
Flash Point	None.	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	1.044	None known
Water Solubility	Completely soluble	None known
Solubility in other solvents	No data available	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	No data available	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%)	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

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Aluminum.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

Section 11. Toxicological information

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

Vapors may irritate throat and respiratory system.

Eye Contact

Causes serious eye damage. Corrosive to the eyes and may cause severe damage including blindness.

Skin Contact

Corrosive. Causes severe skin burns.

Ingestion

Ingestion of corrosive substances can cause burns of the upper digestive and respiratory tract.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
2-Butoxyethanol	= 470 mg/kg (Rat)	= 400 mg/kg (Rabbit) = 2270 mg/kg (Rat)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Sodium hydroxide	-	1350 mg/kg (Rabbit)	-
Sodium metasilicate	= 600 mg/kg (Rat)		
Tetrasodium EDTA	10 g/kg (Rat)	-	-
Alcohols, C12-15, ethoxylated	= 2 g/kg (Rat)		

Skin corrosion/irritation

Causes severe burns

Eye damage/irritation

Risk of serious damage to eyes.

Sensitization

None known.

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.

Aspiration Hazard

No information available.

Section 12. Ecological information

12.1. Toxicity**Ecotoxicity Effects**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
2-Butoxyethanol		LC50 96 h: = 1490 mg/L static (Lepomis macrochirus) LC50 96 h: = 2950 mg/L (Lepomis macrochirus)		EC50 24 h: 1698 - 1940 mg/L (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna)
Sodium hydroxide		LC50 96 h: = 45.4 mg/L static (Oncorhynchus mykiss)		
Sodium metasilicate		LC50 96 h: = 210 mg/L semi-static (Brachydanio rerio) LC50 96 h: = 210 mg/L (Brachydanio rerio)		EC50 96 h: = 216 mg/L (Daphnia magna)

Tetrasodium EDTA	EC50 72 h: = 1.01 mg/L (Desmodesmus subspicatus)	LC50 96 h: = 41 mg/L static (Lepomis macrochirus) LC50 96 h: = 59.8 mg/L static (Pimephales promelas)		EC50 24 h: = 610 mg/L (Daphnia magna)
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12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential.

Chemical Name	Log Pow
2-Butoxyethanol	0.81

12.4. Mobility in soil

This information is not available.

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 as hazardous waste in compliance with local and national regulations. Should not be released into the environment.
Contaminated Packaging	Do not re-use empty containers. Dispose of in accordance with local regulations.
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	UN3266
14.2. Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (Mixture)
14.3. Hazard Class	8
14.4. Packing Group	III
Description	UN3266, Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide, Sodium metasilicate), 8, III, Mixture
14.5. Marine Pollutant	None.
14.6. Special Provisions	None.
EmS No.	F-A, S-B
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	UN3266
14.2. Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (Mixture)
14.3. Hazard Class	8
14.4. Packing Group	III
Description	UN3266 Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide, Sodium metasilicate), 8, III, Mixture
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	C5

ADR

14.1. UN-Number	UN3266
14.2. Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (Mixture)
14.3. Hazard Class	8
14.4. Packing Group	III
Description	UN3266 Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide, Sodium metasilicate), 8, III,, Mixture(E)
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
Classification Code	C5
Tunnel Restriction Code	(E)

ICAO

14.1. UN-Number	UN3266
14.2. Proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (Mixture)
14.3. Hazard Class	8
14.4. Packing Group	III
Description	UN3266, Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide, Sodium metasilicate), 8, III, Mixture
14.5. Environmental hazard	None.
14.6. Special Provisions	None.

IATA

14.1. UN-Number	UN3266
14.2. Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (Mixture)
14.3. Hazard Class	8
14.4. Packing Group	III
Description	UN3266, Corrosive liquid, basic, inorganic, n.o.s.(Sodium hydroxide, Sodium metasilicate), 8, III, Mixture
14.5. Environmental hazard	None.
14.6. Special Provisions	None.
ERG Code	8L

Section 15. Regulatory information

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

National Regulations

WGK Classification Water endangering class = 1

Occupational Illnesses (R-463-3, France)

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Not determined
ENCS	Not determined

IECSC	Complies
AICS	Not determined
KECL	Complies

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**

R38 - Irritating to skin

R35 - Causes severe burns

R34 - Causes burns

R37 - Irritating to respiratory system

R41 - Risk of serious damage to eyes

R22 - Harmful if swallowed

R50 - Very toxic to aquatic organisms

R36/38 - Irritating to eyes and skin

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

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

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H332 - Harmful if inhaled

H319 - Causes serious eye irritation

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H412 - Harmful to aquatic life with long lasting effects

EUH210 - Safety data sheet available on request

Key literature references and sources for datawww.ChemADVISOR.com/**Issuing Date** 18-Dec-2014**Revision Date** 18-Dec-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

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