



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>Marine Biodegradable Multipurpose Lubricant</b>		
Product Code	99705		
SDS number	6806		
Other means of identification	Not available.		
Recommended use	Not available.		
Recommended restrictions	None known.		

## 2. Hazard(s) identification

Physical hazards	Not classified.		
Health hazards	Acute toxicity, inhalation	Category 3	
	Specific target organ toxicity, repeated exposure	Category 1	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3	
	Hazardous to the aquatic environment, long-term hazard	Category 3	
OSHA defined hazards	Not classified.		
Label elements			
Hazard symbol	None.		
Signal word	None.		
Hazard statement	Harmful to aquatic life. Harmful to aquatic life with long lasting effects.		
Precautionary statement			
Prevention	Avoid release to the environment.		
Response	Wash hands after handling.		
Storage	Store away from incompatible materials.		
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.		
Hazard(s) not otherwise classified (HNOC)	None known.		
Supplemental information	None.		

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-butoxyethanol		111-76-2	1 - < 3
Butylhydroxytoluene		128-37-0	< 1
Other components below reportable levels			90 - 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur. Never give liquid to an unconscious person.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	<p>This product is miscible in water.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
<b>Environmental precautions</b>	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	PEL	240 mg/m <sup>3</sup>
		50 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Butylhydroxytoluene (CAS 128-37-0)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction and vapor.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-butoxyethanol (CAS 111-76-2)	TWA	24 mg/m <sup>3</sup>
		5 ppm
Butylhydroxytoluene (CAS 128-37-0)	TWA	10 mg/m <sup>3</sup>

### Biological limit values

#### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

\* - For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

#### US - Minnesota Haz Subs: Skin designation applies

2-butoxyethanol (CAS 111-76-2) Skin designation applies.

#### US - Tennessee OELs: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

#### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Oily. Liquid.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Amber.
<b>Odor</b>	Mild.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	335.12 °F (168.4 °C)
<b>Flash point</b>	239.0 °F (115.0 °C) Pensky-Martens Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1.17 hPa estimated
<b>Density</b>	896.00 kg/m <sup>3</sup>
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Negligible
<b>Solubility (other)</b>	Oil
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	7.31 cSt
<b>Viscosity temperature</b>	104 °F (40 °C)
<b>Other information</b>	
<b>Flammability class</b>	Combustible IIIB estimated
<b>Flash point class</b>	Combustible IIIA
<b>Percent volatile</b>	< 3 %
<b>Pour point</b>	-0.4 °F (-18 °C)
<b>Specific gravity</b>	0.9
<b>VOC</b>	< 3 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.

**Hazardous decomposition products** At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Causes skin and eye irritation. Respiratory tract irritation. Causes skin irritation.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
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Marine Biodegradable Multipurpose Lubricant

#### **Acute**

##### **Dermal**

LD50 Rabbit 9662 mg/kg estimated

##### **Inhalation**

LC50 Mouse 17500 ppm, 7 Hours estimated

Rat 11250 ppm, 4 Hours estimated

##### **Oral**

LD50 Guinea pig 30 g/kg estimated

Mouse 30 g/kg estimated

Rabbit 8 g/kg estimated

Rat 19033 mg/kg estimated

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
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2-butoxyethanol (CAS 111-76-2)

#### **Acute**

##### **Dermal**

LD50 Rabbit 400 mg/kg

##### **Inhalation**

LC50 Mouse 700 ppm, 7 Hours

Rat 450 ppm, 4 Hours

##### **Oral**

LD50 Guinea pig 1.2 g/kg

Mouse 1.2 g/kg

Rabbit 0.32 g/kg

Rat 560 mg/kg

Butylhydroxytoluene (CAS 128-37-0)

#### **Acute**

##### **Oral**

LD50 Guinea pig 10700 mg/kg

Mouse 1040 mg/kg

Rat 890 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Not applicable.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
2-BUTOXYETHANOL (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.
BUTYLATED HYDROXYTOLUENE (BHT) (CAS 128-37-0)	3 Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.  2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Product	Species		Test Results
Marine Biodegradable Multipurpose Lubricant			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	480 mg/l, 48 hours estimated
Fish	LC50	Fish	68500 mg/l, 96 hours estimated
Components	Species		Test Results
2-butoxyethanol (CAS 111-76-2)			
<b>Aquatic</b>			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/l, 96 hours
Butylhydroxytoluene (CAS 128-37-0)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia pulex)	1.44 mg/l, 48 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

2-butoxyethanol 0.83

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

### CERCLA Hazardous Substance List (40 CFR 302.4)

2-butoxyethanol (CAS 111-76-2) Listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312** No

### Hazardous chemical

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
2-butoxyethanol	111-76-2	1 - < 3

### Other federal regulations

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

2-butoxyethanol (CAS 111-76-2)

### US. Massachusetts RTK - Substance List

2-butoxyethanol (CAS 111-76-2)  
Butylhydroxytoluene (CAS 128-37-0)

### US. New Jersey Worker and Community Right-to-Know Act

2-butoxyethanol (CAS 111-76-2)  
Butylhydroxytoluene (CAS 128-37-0)

### US. Pennsylvania Worker and Community Right-to-Know Law

2-butoxyethanol (CAS 111-76-2)  
Butylhydroxytoluene (CAS 128-37-0)

**US. Rhode Island RTK**

2-butoxyethanol (CAS 111-76-2)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 03-29-2016

**Revision date** 05-20-2016

**Version #** 4.0

**Disclaimer**

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