

## MATERIAL SAFETY DATA SHEET

**Product Trade Name:** MUSOL E SOLVENT

**Revision Date:** 06-Dec-2012

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Dangerous Goods according to the criteria of ADG.

**Manufacturer/Supplier** Halliburton Australia Pty. Ltd.  
15 Marriott Road  
Jandakot  
WA 6164  
Australia

ACN Number: 009 000 775  
Telephone Number: 61 (08) 9455 8300  
Fax Number: 61 (08) 9455 5300

**Product Emergency Telephone**

Australia: 08-64244950  
Papua New Guinea: 05 1 281 575 5000  
NewZealand: 06-7559274

**Fire, Police & Ambulance - Emergency Telephone**

Australia: 000  
Papua New Guinea: 000  
New Zealand: 111

### Identification of Substances or Preparation

**Product Trade Name:** MUSOL E SOLVENT  
**Synonyms:** None  
**Chemical Family:** Glycol Ether  
**UN Number:** , UN3092  
**Dangerous Goods Class:** 3  
**Subsidiary Risk:** None  
**Hazchem Code:** 2[Y]E  
**Poisons Schedule:** None Allocated  
**Application:** Surfactant Solvent

**Prepared By** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

1-Methoxy-2-propanol	107-98-2	60 - 100%	TWA: 100 ppm TWA: 369 mg/m <sup>3</sup> STEL: 150 ppm STEL: 553 mg/m <sup>3</sup>	STEL: 150 ppm STEL: 553 mg/m <sup>3</sup> TWA: 100 ppm TWA: 369 mg/m <sup>3</sup>	TWA: 100 ppm STEL: 150 ppm
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**Non-Hazardous Substance to Total of 100%**

## 3. HAZARDS IDENTIFICATION

**Hazard Overview** May cause eye and skin irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed. Flammable.

**Risk Phrases** R10 Flammable.

**HSNO Classification** Not Determined

## 4. FIRST AID MEASURES

**Inhalation** If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

**Skin** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

**Eyes** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Ingestion** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Notes to Physician** Not Applicable

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media** Water fog, carbon dioxide, foam, dry chemical.

**Extinguishing media which must not be used for safety reasons** None known.

**Special Exposure Hazards** May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas. Vapors may travel along the ground to be ignited at distant locations.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures** Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

**Environmental Precautionary Measures** Prevent from entering sewers, waterways, or low areas.

**Procedure for Cleaning / Absorption**

Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Contain spill with sand or other inert materials. Scoop up and remove.

**7. HANDLING AND STORAGE**

**Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Storage Information**

Store away from oxidizers. Keep from heat, sparks, and open flames. Keep container closed when not in use. May discolor mild steel. Product has a shelf life of 36 months.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

**Respiratory Protection**

Organic vapor respirator.

**Hand Protection**

Impervious rubber gloves.

**Skin Protection**

Rubber apron.

**Eye Protection**

Chemical goggles; also wear a face shield if splashing hazard exists.

**Other Precautions**

Eyewash fountains and safety showers must be easily accessible.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Ether
<b>pH:</b>	Not Determined
<b>Specific Gravity @ 20 C (Water=1):</b>	0.92
<b>Density @ 20 C (kg/l):</b>	0.918
<b>Bulk Density @ 20 C (kg/m<sup>3</sup>):</b>	Not Determined
<b>Boiling Point/Range (C):</b>	117
<b>Freezing Point/Range (C):</b>	-95
<b>Pour Point/Range (C):</b>	Not Determined
<b>Flash Point/Range (C):</b>	31
<b>Flash Point Method:</b>	Not Determined
<b>Autoignition Temperature (C):</b>	277
<b>Flammability Limits in Air - Lower (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Lower (%):</b>	3
<b>Flammability Limits in Air - Upper (g/m<sup>3</sup>):</b>	Not Determined
<b>Flammability Limits in Air - Upper (%):</b>	12
<b>Vapor Pressure @ 20 C (mmHg):</b>	10.9
<b>Vapor Density (Air=1):</b>	Not Determined
<b>Percent Volatiles:</b>	Not Determined
<b>Evaporation Rate (Butyl Acetate=1):</b>	Not Determined
<b>Solubility in Water (g/100ml):</b>	Soluble
<b>Solubility in Solvents (g/100ml):</b>	Not Determined
<b>VOCs (g/l):</b>	Not Determined
<b>Viscosity, Dynamic @ 20 C (centipoise):</b>	Not Determined
<b>Viscosity, Kinematic @ 20 C (centistokes):</b>	Not Determined
<b>Partition Coefficient/n-Octanol/Water:</b>	0.01

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight (g/mole):	Not Determined
Decomposition Temperature (C):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong oxidizers.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide.
Additional Guidelines	Not Applicable

## 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

### Symptoms related to exposure **Inhalation**

May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

### **Skin Contact**

May be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause skin irritation.

### **Eye Contact**

May cause eye irritation.

### **Ingestion**

May cause abdominal pain, vomiting, nausea, and diarrhea. May produce nervous system effects such as feeling of weakness, unsteady walk, and dilation of blood vessels.

**Aggravated Medical Conditions** Skin disorders. Eye ailments.

**Chronic Effects/Carcinogenicity** May cause testicular toxicity. May cause birth defects.

**Other Information** None known.

### **Toxicity Tests**

**Oral Toxicity:** Not determined

**Dermal Toxicity:** Not determined

**Inhalation Toxicity:** Not determined

**Primary Irritation Effect:** Not determined

**Carcinogenicity** Not determined

**Genotoxicity:** Not determined

**Reproductive /  
Developmental Toxicity:** Not determined

## 12. ECOLOGICAL INFORMATION

**Mobility (Water/Soil/Air)** Not determined

**Persistence/Degradability** Not determined

**Bio-accumulation** Not determined

### Ecotoxicological Information

**Acute Fish Toxicity:** Not determined

**Acute Crustaceans Toxicity:** Not determined

**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined

**Other Information** Not applicable

## 13. DISPOSAL CONSIDERATIONS

**Disposal Method** Disposal should be made in accordance with federal, state, and local regulations.

**Contaminated Packaging** Follow all applicable national or local regulations.

## 14. TRANSPORT INFORMATION

### Land Transportation

#### ADR

UN3092, 1-Methoxy-2-Propanol Solution, 3, III

### Air Transportation

#### ICAO/IATA

UN3092, 1-Methoxy-2-Propanol Solution, 3, III

### Sea Transportation

#### IMDG

UN3092, 1-Methoxy-2-Propanol Solution, 3, III, (31.7 C)  
EmS F-A, S-D

### Other Transportation Information

**Labels:** Flammable Liquid

## 15. REGULATORY INFORMATION

### Chemical Inventories

**Australian AICS Inventory** All components listed on inventory or are exempt.  
**New Zealand Inventory of Chemicals** This product does not comply with NZIOC

**US TSCA Inventory** All components listed on inventory or are exempt.

<b>EINECS Inventory</b>	This product, and all its components, complies with EINECS
<b>Classification</b>	Not Classified
<b>Risk Phrases</b>	R10 Flammable.
<b>Safety Phrases</b>	S2 Keep out of reach of children. S24 Avoid contact with skin.

## 16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS  
Not applicable

### Contact

#### Australian Poisons Information Centre

24 Hour Service: - 13 11 26  
Police or Fire Brigade: - 000 (exchange): - 1100

#### New Zealand National Poisons Centre

0800 764 766

### Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

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**\*\*\*END OF MSDS\*\*\***