

SAFETY DATA SHEET

Conforms to OSHA HazCom 2012 Standard

Section 5 - Fire-fighting measures

Suitable extinguishing media	Carbon dioxide, alcohol-resistant foam, dry chemical, water spray, or water fog.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	None known.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment /instruction	Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool.
General fire hazards	This product is not flammable or combustible.
Specific Methods	

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures.	Isolate area. Keep unnecessary personnel away. Use personal protection as recommended in Section 8 of the SDS.
Methods and materials for containment and cleaning up	SMALL SPILLAGE: Absorb spillage with suitable absorbent material. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water. LARGE SPILLS: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. After removal flush contaminated area thoroughly with water.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Do not taste or swallow. Use with adequate ventilation. Wash thoroughly after handling. Use Personal Protective Equipment recommended in section 8 of the SDS.
Conditions for safe storage, including any incompatibilities	Store away from incompatible materials. Keep container closed.

Section 8 - Exposure control/personal protection

Occupational exposure limits		
US. Workplace environmental Exposure Level (WEEL) Guides		
Component	Type	Value
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)	TWA	140 mg/m ³ , 25 ppm
Biological limit values	No biological exposure limits noted for the ingredient(s).	
Exposure guidelines	Use personal protective equipment as required. Keep working clothes separately.	
Appropriate engineering controls	Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Provide easy access to water supply and eye wash facilities.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.	
Skin protection		
Hand protection	Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier.	
Other	Wear appropriate chemical resistant clothing.	
Respiratory protection	Use a respirator when local exhaust or ventilation is not adequate to keep exposures below the OEL. In a confined space a supplied respirator may be required.	
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.	

Section 9 - Physical and chemical properties

Appearance	Opaque Liquid.
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SAFETY DATA SHEET

Conforms to OSHA HazCom 2012 Standard

Physical state	Liquid.
Form	Liquid.
Color	White.
Odor	Acrylic.
Odor threshold	Not available.
pH (Concentrate)	8.1
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	None to boiling.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Similar to water.
Vapor density	Similar to water.
Relative density	1.03 ± 0.01
Relative density temperature	75 °F (23.89 °C)
Solubilities	Soluble.
Partition Coefficient n-octanol/water	Not available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	< 10 cP
Viscosity Temperature	75 °F (23.89 °C)

Section 10 - Stability and reactivity

Reactivity	Not available.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reaction	Hazardous polymerization does not occur.
Conditions to Avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide.

Section 11 - Toxicological information

Information on likely routes of exposure	
Ingestion	No adverse effects due to ingestion are expected.
Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Eye contact	May cause eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	May cause eye irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Information on toxicological effects.	
Acute toxicity	Not expected to be hazardous.
Skin corrosion/irritation	Prolonged or repeated contact may dry skin and cause irritation.
Serious eye damage/ eye irritation	May cause eye irritation.
Respiratory sensitization	Not classified.
Skin sensitization	Not available.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.

SAFETY DATA SHEET

Conforms to OSHA HazCom 2012 Standard

Reproductive toxicity Not classified.
Specific target organ toxicity - single exposure Not classified.
Specific target organ toxicity - repeated exposure Not classified.
Aspiration hazard Not available.
Chronic effects
Further information

Section 12 - Ecological Information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Aquatic		
Aquatic		
Aquatic		
Aquatic		

Persistence and degradability The product is expected to be biodegradable.
Bioaccumulative potential Not known.
Mobility in soil Not available.
Mobility in general The product is water soluble and may spread in water systems.
Other adverse effects None known.

Section 13 - Disposal considerations

Disposal instructions Dispose in accordance with applicable federal, state, and local regulations.
Local disposal regulations Dispose of in accordance with local regulations.
Hazardous waste code Waste codes should be assigned by the user based on the application for which the product was used.
Waste from residues / unused products Dispose in accordance with all applicable regulations.
Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

DOT Not regulated as dangerous goods.

UN number
UN proper shipping name
Transport hazard class(es)
Subsidiary class(es)
Packing group
Special precautions for users
Labels required
Special provisions
Packaging exemption
Packaging non bulk
Packaging bulk

IATA Not regulated as dangerous goods.

UN number
UN proper shipping name
Transport hazard class(es)
Subsidiary class(es)
Packing group
Environmental hazards
Labels required
ERG Code

SAFETY DATA SHEET
Conforms to OSHA HazCom 2012 Standard

Special precautions for user

IMDG Not regulated as dangerous goods.

- UN number
- UN proper shipping name
- Transport hazard class(es)
- Subsidiary class(es)
- Packaging group
- Environmental hazards
- Marine pollutant
- Labels required
- EmS

Special precautions for user

Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code This substance/mixture is not intended to be transported in bulk.

General Information

Section 15 - Regulatory Information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001- CERCLA Hazardous Substance List (40 CFR 302.4) Not listed.

Components	Result
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)	LISTED
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories	Immediate Hazard	No
	Delayed Hazard	No
	Fire Hazard	No
	Pressure Hazard	No
	Reactivity Hazard	No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS #	% by wt.
Diethylene Glycol Monoethyl Ether	111-90-0	1 - 5
Tris(2-Butoxyethyl) Phosphate	78-51-3	1 - 5

Other federal regulations

Components
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause

SAFETY DATA SHEET

Conforms to OSHA HazCom 2012 Standard

**US.Massachusetts RTK -
Substance List**

cancer, birth defects or other reproductive harm.
Components
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

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

Components
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

**US.Pennsylvania RTK -
Hazardous Substances**

Components
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

US.Rhode Island RTK

Components
Diethylene Glycol Monoethyl Ether (CAS 111-90-0)
Tris(2-Butoxyethyl) Phosphate (CAS 78-51-3)

**US - California Proposition 65 -
Carcinogens Reproductive**

Not listed.

International Inventories

Country(s) or region	Inventory Name	On Inventory (yes/no)*
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)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes
Unites States Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies 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).

Section 16 - Other information, including date of preparation or last version

Issue date 5/28/2014

Revision date

Version # 01

Further information

List of abbreviations

References

Disclaimer

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