

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/9/2021 Revision date: 11/9/2021 Supersedes: 9/18/2021 Version: 1.1

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Substance
Trade name : Diethylene Glycol
Chemical name : Diethylene Glycol
CAS-No. : 111-46-6
Formula : C4H10O3

Synonyms : Bis(2-hydroxyethyl) ether / DEG / Diglycol / Dihydroxydiethyl ether / 2,2'-Dihydroxyethyl ether /

Ethanol, 2,2'-oxybis- / 2,2'-Oxybisethanol / 2,2'-Oxydiethanol / 2,2'-Oxybis(ethanol) /

DIETHYLENE GLYCOL / Eiethylene glycol

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Chemical raw material

Fuel: additive Oil: additive Softener

#### 1.3. Supplier

Monument Chemical 2450 S. Gulfway Dr. Port Arthur, TX, 77641 USA T (409) 985-4200 - F (409) 985-6350

sds@monumentchemical.com - www.monumentchemical.com

#### 1.4. Emergency telephone number

Emergency number : 24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24 HR Emergency

Assistance: 1-(409) 985-4200

#### **SECTION 2: Hazard(s) identification**

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Acute toxicity (oral) Category 4 H302 Harmful if swallowed

Specific target organ toxicity (repeated exposure) Category 2 H373 May cause damage to organs through prolonged or repeated

exposure

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)





Signal word (GHS US) : Warning

Hazard statements (GHS US) : H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

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P270 - Do not eat, drink or smoke when using this product.

P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P330 - Rinse mouth.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Substance type Mono-constituent Chemical name Diethylene Glycol CAS-No. : 111-46-6

Name	Product identifier	%
2,2' -oxybisethanol, diethylene glycol	CAS-No.: 111-46-6	≥ 98
Triethylene glycol	CAS-No.: 112-27-6	≤ 1
Ethylene glycol	CAS-No.: 107-21-1	≤ 1

Full text of hazard classes and H-statements : see section 16

#### 3.2. Mixtures

Not applicable

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice

(show the label where possible).

First-aid measures after inhalation Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact Remove affected clothing and wash all exposed skin area with mild soap and water, followed by

warm water rinse.

First-aid measures after eye contact Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON

CENTER or doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/effects after inhalation

symptoms

: No effects known. Symptoms/effects after skin contact No effects known Symptoms/effects after eye contact No effects known.

Symptoms/effects after ingestion Swallowing a small quantity of this material will result in serious health hazard.

Chronic symptoms Skin rash/inflammation. Feeling of weakness. Affection of the renal tissue. Decreased renal

function.

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#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Temperature above

flashpoint: higher fire/explosion hazard.

Explosion hazard : INDIRECT EXPLOSION HAZARD: Reactions with explosion hazards: see "Reactivity Hazard".

Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer

to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapor. Avoid breathing dust/fume/gas/mist/vapors/spray.

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Hygiene measures

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: Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in

a cool, well ventilated place away from : Heat sources, Ignition sources, Incompatible materials.

Keep container closed when not in use.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature > -8 °C

: KEEP SUBSTANCE AWAY FROM: heat sources. Heat-ignition

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases. peroxides.

water/moisture.

Storage area : Meet the legal requirements. Store at ambient temperature. Store in a dry area. Keep container

in a well-ventilated place.

Special rules on packaging : SPECIAL REQUIREMENTS: closing, correctly labelled, meet the legal requirements. Secure

fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: carbon steel. steel. stainless steel. aluminium. zinc. glass. plastics.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

|--|

**USA - AIHA - Occupational Exposure Limits** 

WEEL TWA 10 mg/m<sup>3</sup>

#### 2,2' -oxybisethanol, diethylene glycol (111-46-6)

#### **USA - AIHA - Occupational Exposure Limits**

WEEL TWA 10 mg/m<sup>3</sup>

#### Triethylene glycol (112-27-6)

No additional information available

#### Ethylene glycol (107-21-1)

USA - ACGIH - Occupational Exposure Limits	
Local name	Ethylene glycol
ACGIH OEL TWA [ppm]	25 ppm
ACGIH OEL STEL	100 mg/m³
ACGIH OEL STEL [ppm]	50 ppm
Remark (ACGIH)	Kidney dam; URT & eye irr
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2021

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

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#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Materials for protective clothing:

GIVE GOOD RESISTANCE: chloroprene rubber. chlorosulfonated polyethylene. neoprene. nitrile rubber. PVA. PVC. viton. neoprene/SBR

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

#### Respiratory protection:

Wear appropriate mask

#### Other information:

Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Colorless, syrupy liquid.

Color : Colorless
Odor : odorless

Odor threshold : No data available

PH : 6 – 9
Melting point : -8 °C

Freezing point : No data available
Boiling point : 244.9 °C (at 1013 hPa)

Critical temperature : 408 °C

Critical pressure : 46598 hPa

Flash point : 124 °C; 305F

Relative evaporation rate (butyl acetate=1) : > 0.01

Relative evaporation rate (ether=1) : > 3900

Flammability (solid, gas) : Not applicable. Non flammable.

Vapor pressure : < 0.013 hPa (at 20 °C)

Relative vapor density at 20 °C : 3.7

Particle size : Not applicable (liquid)

Relative density : 1.12 (20 °C)

Relative density of saturated gas/air mixture : 1

Density : 1.115 – 1.117 g/cm³ (at 20 °C)

Molecular mass : 106.12 g/mol

Solubility : Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform.

Soluble in cyclohexanone. Soluble in ethyleneglycol.

Water: 100 g/100ml (20 °C)

Partition coefficient n-octanol/water (Log Pow) : -1.98 (at 25 °C)

Auto-ignition temperature : 228.89 °C

Decomposition temperature : No data available in the literature Viscosity, kinematic : No data available in the literature

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Viscosity, dynamic : 30 mPa·s (25 °C)

Explosion limits : Lower explosive limit (LEL): 1.6 vol %

Upper explosive limit (UEL): 37 vol %

Explosive properties : No data available
Oxidizing properties : No data available

#### 9.2. Other information

Specific conductivity : 58600000 pS/m
Saturation concentration : 0.1 g/m³
VOC content : 0 %
Refractive index : 1.445 at 20 C

Other properties : Gas/vapour heavier than air at 20°C. Clear. Hygroscopic. Slightly volatile.

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts with (some) acids: (increased) risk of fire/explosion. Violent to explosive reaction on exposure to temperature rise with (some) acids/bases.

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Diethylene Glycol (111-46-6)	
LD50 oral rat	12565 mg/kg
LD50 dermal rat	11890 g/kg
LD50 dermal rabbit	11890 mg/kg
LC50 Inhalation - Rat	> 4600 mg/m³ (Exposure time: 4 h)
ATE US (oral)	505.051 mg/kg body weight
ATE US (dermal)	11890 mg/kg body weight

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2,2' -oxybisethanol, diethylene glycol (111-46-6)	
LD50 oral rat	12565 mg/kg
LD50 dermal rabbit	11890 mg/kg
LC50 Inhalation - Rat	> 4600 mg/m³ (Exposure time: 4 h)
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	11890 mg/kg body weight
Triethylene glycol (112-27-6)	
LD50 oral rat	17 g/kg
LD50 dermal rabbit	> 20 mg/kg
LC50 Inhalation - Rat	> 5.2 mg/l/4h
ATE US (oral)	17000 mg/kg body weight
Ethylene glycol (107-21-1)	
LD50 oral rat	4700 mg/kg
LD50 dermal rat	10600 mg/kg
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	10600 mg/kg body weight
Skin corrosion/irritation :	Not classified
Serious eye damage/irritation :	pH: 6 – 9 Not classified
	pH: 6 – 9
. ,	Not classified
Germ cell mutagenicity :	Not classified
<u> </u>	Not classified
Diethylene Glycol (111-46-6)	
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)
2,2' -oxybisethanol, diethylene glycol (111-46-	-6)
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Triethylene glycol (112-27-6)	
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)

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Ethylene glycol (107-21-1)	
NOAEL (chronic,oral,animal/male,2 years)	1500 mg/kg body weight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Reproductive toxicity	Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Diethylene Glycol (111-46-6)	
LOAEL (oral,rat,90 days)	40000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
2,2' -oxybisethanol, diethylene glycol (111-4	6-6)
LOAEL (oral,rat,90 days)	40000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Ethylene glycol (107-21-1)	
STOT-repeated exposure	May cause damage to organs (kidneys) through prolonged or repeated exposure.
Aspiration hazard	Not classified
Viscosity, kinematic	: No data available in the literature
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met. Harmful if swallowed.
symptoms	
- <b>,,</b>	: No effects known.
Symptoms/effects after skin contact	: No effects known.
Symptoms/effects after eye contact	: No effects known.
Symptoms/effects after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
Chronic symptoms	: Skin rash/inflammation. Feeling of weakness. Affection of the renal tissue. Decreased renal function.

### SECTION 12: Ecological information

12.1. Toxicity		
Ecology - general :	Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.	
<b>.</b> ,	Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photolysis in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).	
Diethylene Glycol (111-46-6)		
LC50 - Fish [1]	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'	
2,2' -oxybisethanol, diethylene glycol (111-46-6)		
LC50 - Fish [1]	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
EC50 - Crustacea [1]	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'	
Triethylene glycol (112-27-6)		
LC50 - Fish [1]	56200 – 63700 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	

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Triethylene glycol (112-27-6)		
EC50 - Crustacea [1]	42426 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
NOEC (chronic)	> 15000 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
Ethylene glycol (107-21-1)		
LC50 - Fish [1]	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)	
EC50 - Crustacea [1]	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 - Fish [2]	14 – 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'	

### 12.2. Persistence and degradability

Diethylene Glycol (111-46-6)	
Persistence and degradability	Not established.
Biochemical oxygen demand (BOD)	0.02 g O₂/g substance
Chemical oxygen demand (COD)	1.51 g O₂/g substance
ThOD 1.51 g O <sub>2</sub> /g substance	
2.2' -oxybisethanol, diethylene glycol (111-46-6)	

2,2 -0xybisetriation, dietriylerie giycor (111-40-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O₂/g substance
Chemical oxygen demand (COD)	1.51 g O₂/g substance
ThOD	1.51 g O <sub>2</sub> /g substance

Triethylene glycol (112-27-6)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.03 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.57 g O₂/g substance
ThOD	1.6 g O <sub>2</sub> /g substance

Ethylene glycol (107-21-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O₂/g substance
Chemical oxygen demand (COD)	1.24 g O₂/g substance
ThOD	1.29 g O₂/g substance

### 12.3. Bioaccumulative potential

Diethylene Glycol (111-46-6)	
BCF - Fish [1]	100 – 180
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)
Bioaccumulative potential	Not established.

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2,2' -oxybisethanol, diethylene glycol (111-46-6)		
BCF - Fish [1]	100 – 180	
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Triethylene glycol (112-27-6)		
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)	
Bioaccumulative potential	Not bioaccumulative.	
Ethylene glycol (107-21-1)		
Partition coefficient n-octanol/water (Log Pow)	-1.93	
Bioaccumulative potential	Not bioaccumulative.	

#### 12.4. Mobility in soil

Divide the color of (444, 40.0)		
Diethylene Glycol (111-46-6)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)	
Ecology - soil	Highly mobile in soil.	
2,2' -oxybisethanol, diethylene glycol (111-46-6)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)	
Ecology - soil	Highly mobile in soil.	
Triethylene glycol (112-27-6)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, SRC PCKOCWIN v1.66, Calculated value)	
Ecology - soil	Highly mobile in soil.	
Ethylene glycol (107-21-1)		
Surface tension	48.4 mN/m (20 °C)	
Ecology - soil	Highly mobile in soil.	

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

### **SECTION** 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods Product/Packaging disposal recommendations

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No

1357/2014 and Regulation (EU) No 2017/997.

Ecology - waste materials : Avoid release to the environment.

#### **SECTION 14: Transport information**

In accordance with DOT / IMDG / IATA

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

#### 14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

**IMDG** 

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

### 14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

#### DOT

No data available

#### **IMDG**

No data available

#### **IATA**

No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Ethylene glycol CAS-No. 107-21-1 ≤ 1%

#### Ethylene glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 5000 lb

#### 15.2. International regulations

#### **CANADA**

#### Diethylene Glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

#### 2,2' -oxybisethanol, diethylene glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

#### Triethylene glycol (112-27-6)

Listed on the Canadian DSL (Domestic Substances List)

#### Ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

#### Diethylene Glycol (111-46-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 2,2' -oxybisethanol, diethylene glycol (111-46-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Triethylene glycol (112-27-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Ethylene glycol (107-21-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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#### **National regulations**

#### Diethylene Glycol (111-46-6)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemicals Inventory)

#### 2,2' -oxybisethanol, diethylene glycol (111-46-6)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemicals Inventory)

#### Triethylene glycol (112-27-6)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemicals Inventory)

#### Ethylene glycol (107-21-1)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on the NCI (Vietnam - National Chemicals Inventory)

#### 15.3. US State regulations

#### Diethylene Glycol (111-46-6)

State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List

#### Safety Data Sheet

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This product can expose you to Ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
2,2' -oxybisethanol, diethylene glycol(111-46-6)	U.S Pennsylvania - RTK (Right to Know) List
Triethylene glycol(112-27-6)	U.S Pennsylvania - RTK (Right to Know) List
Ethylene glycol(107-21-1)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List

#### **SECTION 16: Other information**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 11/09/2021 Other information : None.

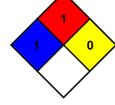
Full text of H-phrases	
H302	Harmful if swallowed
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant

irritation.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Safety Data Sheet (SDS), USA

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