

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: FLEXSORB™ SE
Chemical name	: Hindered Alkanolamine
Formula	: C8H19NO2

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

Use of the substance/mixture	: Gas treatment Laboratory chemical
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#### 1.3. Supplier

Monument Chemical  
10200 Bay Area Blvd.  
Pasadena, TX 77507 - USA  
T (281)474-5550  
[sds@monumentchemical.com](mailto:sds@monumentchemical.com) - [www.monumentchemical.com](http://www.monumentchemical.com)

#### 1.4. Emergency telephone number

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

### 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
Skin corrosion/irritation Category 1A	H314	Causes severe skin burns and eye damage

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) :

Danger

Hazard statements (GHS US) :

H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS US) :

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell.  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
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 doctor, a POISON CENTER.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P330 - Rinse mouth.  
P363 - Wash contaminated clothing before reuse.  
P405 - Store locked up.  
P501 - 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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### 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

Chemical name : Hindered Alkanolamine

Name	Product identifier	%
Hindered Alkanolamine*	(CAS-No.) Trade Secret	95 – 99
2,2'-oxybisethanol, diethylene glycol	(CAS-No.) 111-46-6	≤ 2

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.
- First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
- First-aid measures after skin contact : Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
- First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents.
- First-aid measures after ingestion : Rinse mouth with water. Immediately consult a doctor/medical service. Call Poison Information Centre ([www.big.be/antigif.html](http://www.big.be/antigif.html)). Ingestion of large quantities: immediately to hospital.

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

- Potential Adverse human health effects and symptoms : Harmful if swallowed. Causes severe skin burns. Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Causes serious eye damage.
- Symptoms/effects : Causes severe skin burns and eye damage.
- Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract.
- Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.
- Symptoms/effects after eye contact : Corrosion of the eye tissue.
- Symptoms/effects after ingestion : Possible esophageal perforation. Burns to the gastric/intestinal mucosa.
- Chronic symptoms : No effects known.

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

No additional information available

## SECTION 5: Fire-fighting measures

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

- Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (alcohol-resistant). Water spray if puddle cannot expand.
- Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

### 5.2. Specific hazards arising from the chemical

- Fire hazard : DIRECT FIRE HAZARD: Material presenting a fire hazard. INDIRECT FIRE HAZARD: Temperature above flashpoint: higher fire/explosion hazard.
- Hazardous decomposition products in case of fire : On heating/burning: release of toxic and corrosive gases/vapours (carbon monoxide - carbon dioxide, nitrous vapours).

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

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.
- Firefighting instructions : Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
- Protection during firefighting : Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

## 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). Face shield (EN 166). Corrosion-proof suit (EN 14605). Large spills/in enclosed spaces: gas-tight suit (EN 943).
- Emergency procedures : Mark the danger area. No naked flames. Wash contaminated clothes.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

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

- For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.
- Methods for cleaning up : Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : At temperature > flashpoint: use spark-/explosionproof appliances. In finely divided state: use spark-/explosionproof appliances. Keep away from naked flames/heat. Finely divided: keep away from ignition sources/sparks. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Do not discharge the waste into the drain. Keep container tightly closed.
- Hygiene measures : Observe very strict hygiene - avoid contact.

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

- Technical measures : Comply with applicable regulations.
- Storage conditions : 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.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.
- Information on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. copper alloy.
- Storage area : Store in a cool area. Store in a dry area. Ventilation at floor level. Provide for a tub to collect spills. Meet the legal requirements. Keep out of direct sunlight.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. hermetical. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: aluminium. glass. HDPE. stainless steel. steel. carbon steel. MATERIAL TO AVOID: plastics.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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<b>Hindered Alkanolamine</b>	
No additional information available	
<b>Hindered Alkanolamine</b>	
No additional information available	
<b>2,2' -oxybisethanol, diethylene glycol (111-46-6)</b>	
<b>USA - AIHA - Occupational Exposure Limits</b>	
WEEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

### 8.2. Appropriate engineering controls

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

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Materials for protective clothing:

GIVE GOOD RESISTANCE: chloroprene rubber, nitrile rubber, PVC, butyl rubber

#### Hand protection:

Gloves

#### Eye protection:

Face shield (EN 166)

#### Skin and body protection:

Corrosion-proof clothing (EN 14605)

#### Respiratory protection:

High gas/vapour concentration: full face 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 to amber colored liquid.
Color	: Colorless amber
Odor	: Amine-like
Odor threshold	: No data available
pH	: 9 1% in water
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 230 °C (446°F)
Flash point	: 112 °C (234°F)
Relative evaporation rate (butyl acetate=1)	: < 1
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: 4 Pa (38°C; 100°F)
Relative vapor density at 20 °C	: 5.56 (Calculated)
Relative density	: 0.94 (24 °C, ISO 1183-1: Pycnometer Method)
Density	: 0.939 g/cm <sup>3</sup> at 24°C (75°F)
Molecular mass	: 161.24 g/mol
Solubility	: Soluble in water. Water: > 500000 mg/l
Partition coefficient n-octanol/water (Log Pow)	: -2.6 (20°C; 68°F)

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Auto-ignition temperature	: 320 °C (608°F)
Decomposition temperature	: No data available
Viscosity, kinematic	: 64 mm <sup>2</sup> /s (20 °C, OECD 114: Viscosity of Liquids)
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: No data available

### 9.2. Other information

VOC content	: 100 %
Fat solubility	: > 50 g/100ml (37°C; 99°F)
Other properties	: Gas/vapour heavier than air at 20°C. Slightly volatile.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Corrosive vapors.

### 10.2. Chemical stability

Discolours on exposure to air.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

## 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

Hindered Alkanolamine	
LD50 oral rat	1470 mg/kg
LD50 dermal rabbit	> 3160 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)
ATE US (oral)	1470 mg/kg body weight

Hindered Alkanolamine	
LD50 oral rat	1470 mg/kg
LD50 dermal rabbit	> 3160 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male / female, Experimental value, Dermal)
ATE US (oral)	1470 mg/kg body weight

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/m <sup>3</sup> (Exposure time: 4 h)
ATE US (oral)	12565 mg/kg body weight
ATE US (dermal)	11890 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns. pH: 9 1% in water
Serious eye damage/irritation	: Not classified. pH: 9 1% in water

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Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

### 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)

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified.

### Hindered Alkanolamine

NOAEL (oral,rat,90 days)	60 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

### 2,2' -oxybisethanol, 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)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : 64 mm<sup>2</sup>/s (20 °C, OECD 114: Viscosity of Liquids)

Potential Adverse human health effects and symptoms : Harmful if swallowed. Causes severe skin burns. Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Causes serious eye damage.

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Corrosion of the upper respiratory tract.

Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Corrosion of the eye tissue.

Symptoms/effects after ingestion : Possible esophageal perforation. Burns to the gastric/intestinal mucosa.

Chronic symptoms : No effects known.

## 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.
Ecology - air	: 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). Photooxidation in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Slightly harmful to crustacea. Slightly harmful to fishes. No inhibition of activated sludge. Slightly harmful to algae.

### Hindered Alkanolamine

LC50 fish 1	255.3 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	113.6 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 (algae)	170 – 180 mg/l (ISO 10253, 72 h, Skeletonema costatum, Static system, Experimental value, Nominal concentration)

### Hindered Alkanolamine

LC50 fish 1	255.3 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	113.6 mg/l (48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 (algae)	170 – 180 mg/l (ISO 10253, 72 h, Skeletonema costatum, Static system, Experimental value, Nominal concentration)

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Hindered Alkanolamine	
LOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 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 Daphnia 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'

### 12.2. Persistence and degradability

Hindered Alkanolamine	
Persistence and degradability	Readily biodegradable in water.
Hindered Alkanolamine	
Persistence and degradability	Readily biodegradable in water.
2,2' -oxybisethanol, diethylene glycol (111-46-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

Hindered Alkanolamine	
BCF fish 1	3.162 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-2.6 (20°C; 68°F)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Hindered Alkanolamine	
BCF fish 1	3.162 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-2.6 (20°C; 68°F)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
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).

### 12.4. Mobility in soil

Hindered Alkanolamine	
Surface tension	38 mN/m (24 °C, 250 g/l)
Partition coefficient n-octanol/water (Log Koc)	0 – 4.28 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Adsorbs into the soil.
Hindered Alkanolamine	
Surface tension	38 mN/m (24 °C, 250 g/l)
Partition coefficient n-octanol/water (Log Koc)	0 – 4.28 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Adsorbs into the soil.
2,2' -oxybisethanol, diethylene glycol (111-46-6)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

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### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

- Product/Packaging disposal recommendations : Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove to an authorized dump (Class I). Remove to an authorized incinerator with energy recovery.
- 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

#### Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN2735 Amines, liquid, corrosive, n.o.s. (Alkyl amine alcohol), 8, II
- UN-No.(DOT) : UN2735
- Proper Shipping Name (DOT) : Amines, liquid, corrosive, n.o.s.  
Alkyl amine alcohol
- Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
- Packing group (DOT) : II - Medium Danger
- Hazard labels (DOT) : 8 - Corrosive



- DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
- DOT Packaging Bulk (49 CFR 173.xxx) : 242
- DOT Symbols : G - Identifies PSN requiring a technical name
- DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.  
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 154
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 1 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 30 L
- DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
- DOT Vessel Stowage Other : 52 - Stow "separated from" acids
- Emergency Response Guide (ERG) Number : 153
- Other information : No supplementary information available.

#### Transport by sea

- Transport document description (IMDG) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Alkyl amine alcohol), 8, II
- UN-No. (IMDG) : 2735



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Proper Shipping Name (IMDG) : AMINES, LIQUID, CORROSIVE, N.O.S.  
Class (IMDG) : 8 - Corrosive substances  
Packing group (IMDG) : II - substances presenting medium danger

### Air transport

Transport document description (IATA) : UN 2735 Amines, liquid, corrosive, n.o.s. (Alkyl amine alcohol), 8, II  
UN-No. (IATA) : 2735  
Proper Shipping Name (IATA) : Amines, liquid, corrosive, n.o.s.  
Class (IATA) : 8 - Corrosives  
Packing group (IATA) : II - Medium Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Hindered Alkanolamine

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### Hindered Alkanolamine

EPA TSCA Regulatory Flag PMN - PMN - indicates a commenced PMN substance.

### 15.2. International regulations

#### CANADA

#### Hindered Alkanolamine

Listed on the Canadian DSL (Domestic Substances List)

#### Hindered Alkanolamine

Listed on the Canadian DSL (Domestic Substances List)

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

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

#### Hindered Alkanolamine

Listed on ELINCS (European List of Notified Chemical Substances)

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Listed on ELINCS (European List of Notified Chemical Substances)

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

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

#### National regulations

#### Hindered Alkanolamine

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ISHL (Industrial Safety and Health Law)  
Listed on the TCSI (Taiwan Chemical Substance Inventory)  
Listed on the NCI (National Chemicals Inventory)

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Listed on the NCI (National Chemicals Inventory)

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

Listed on the AICS (Australian Inventory of Chemical Substances)  
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 (National Chemicals Inventory)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
2,2' -oxybisethanol, diethylene glycol(111-46-6)	U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

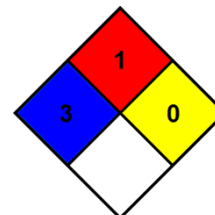
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 03/22/2021  
Other information : None.

Full text of H-phrases:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.  
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.



Hazard Rating  
Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given  
Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)  
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.  
Personal protection : H  
H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

SDS US (GHS HazCom 2012)

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