

Safety Data Sheet ENEA0264
Date of issue: 05/30/2017 Version: 1.0

**SECTION 1: Identification** 

1.1. Product identifier

Product name : ALLYLOXY(POLYETHYLENE OXIDE) (35-50 EO)

Product code : ENEA0264
Product form : Substance
Physical state : Solid

Synonyms : ALLYLOXY PEG

ALLYL ALCOHOL ETHOXYLATE

POLYETHYLENE OXIDE MONOALLYL ETHER

Chemical family : POLYETHER

1.2. Recommended use of the chemical and restrictions on use

Recommended use : Chemical intermediate

For research and industrial use only

## 1.3. Details of the supplier of the safety data sheet

#### **GELEST, INC.**

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

## SECTION 2: Hazard(s) identification

## 2.1. Classification of the substance or mixture

## **GHS-US** classification

Not classified

## 2.2. Label elements

#### **GHS-US labeling**

No labeling applicable

## 2.3. Hazards not otherwise classified (HNOC)

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

No data available

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

3.1. Substances

Substance type : Mono-constituent

Name : ALLYLOXY(POLYETHYLENE OXIDE) (35-50 EO)

CAS No : 27274-31-3

Name	Product identifier	%	GHS-US classification
Polyethylene oxide monoallyl ether	(CAS No) 27274-31-3	97 - 100	Not classified
Allyl alcohol	(CAS No) 107-18-6	< 0.1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Dermal), H310 Acute Tox. 1 (Inhalation:vapour), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400

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

#### 3.2. Mixtures

Not applicable

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#### 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : No information available.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Water fog. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

#### 5.3. Advice for firefighters

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

containers.

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

Avoid all eye and skin contact and do not breathe vapor and mist.

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

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

### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal.

## 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 : Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Use only in well

ventilated areas

Hygiene measures : Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions : Keep container tightly closed.

Incompatible materials : Oxidizing agent.

Storage area : Store in a well-ventilated place. Store away from heat.

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## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

Allyl alcohol (107-18-6)		
ACGIH	ACGIH TWA (ppm)	0.5 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	2 ppm
IDLH	US IDLH (ppm)	20 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	2 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	10 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	4 ppm

#### 8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be

available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles. Contact lenses should not be worn.

: No data available

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. NIOSH-certified dust and mist (teal cartridge) respirator.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid:

1500 - 2000 g/mol Molecular mass Color No data available No data available Odor Odor threshold No data available Refractive index No data available No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : 42 - 48 °C Freezing point : No data available **Boiling point** No data available

Flash point : > 150 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative density : 1.1

Insoluble in water. Solubility Log Pow No data available : No data available Log Kow : 24.5 - 28 cSt @ 100°C Viscosity, kinematic Viscosity, dynamic No data available : No data available Explosive properties Oxidizing properties : No data available **Explosion limits** : No data available

#### 9.2. Other information

Relative vapor density at 20 °C

No additional information available

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

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Oxidizing agent.

#### 10.6. Hazardous decomposition products

Organic acid vapors.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Allyl alcohol (107-18-6)	
LD50 oral rat	64 mg/kg
LD50 oral mouse	96 mg/kg
LD50 dermal rabbit	89 mg/kg
LC50 inhalation rat (mg/l)	0.391 mg/l/4h
ATE US (oral)	64 mg/kg body weight
ATE US (dermal)	89 mg/kg body weight
ATE US (vapors)	0.391 mg/l/4h
ATE US (dust, mist)	0.391 mg/l/4h

## Polyethylene oxide monoallyl ether (27274-31-3)

LD50 oral rat > 2000 mg/kg

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

None of the components in this product at concentrations >0.1% are listed by IARC, NTP,

OSHA or ACGIH as a carcinogen.

Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : No information available.

Symptoms/effects after skin contact : May cause skin irritation.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

#### SECTION 12: Ecological information

#### 12.1. Toxicity

Allyl alcohol (107-18-6)		
LC50 fish 1	0.28 - 0.37 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
LC50 fish 2	0.32 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	

## 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

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Allyl alcohol (107-18-6)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	0.17

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

Effect on ozone layer : No additional information available

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not dispose of waste into sewer.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

#### 14.1. UN number

Not regulated for transport.

### 14.2. UN proper shipping name

Not applicable

## 14.3. Additional information

Other information : No supplementary information available.

#### Transport by sea

No additional information available

#### Air transport

No additional information available

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

Allyl alcohol (107-18-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1 %
Polyethylene oxide monoallyl ether (27274-31-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. International regulations

#### CANADA

CANADA		
Allyl alcohol (107-18-6)		
Listed on the Canadian DSL (Domestic Sub	I on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects	
Polyethylene oxide monoallyl ether (27274-31-3)		
Listed on the Canadian DSL (Domestic Substances List)		

#### **EU-Regulations**

#### Allyl alcohol (107-18-6)

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

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#### **National regulations**

### Allyl alcohol (107-18-6)

Listed on the AICS (Australian Inventory of Chemical Substances)

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

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

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

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

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

#### Polyethylene oxide monoallyl ether (27274-31-3)

Listed on the AICS (Australian Inventory of Chemical Substances)

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Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

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

#### 15.3. US State regulations

### Allyl alcohol (107-18-6)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

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

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

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

#### Full text of H-phrases::

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	H225	Highly flammable liquid and vapor
	H301	Toxic if swallowed
	H310	Fatal in contact with skin
	H315	Causes skin irritation
	H319	Causes serious eye irritation
	H330	Fatal if inhaled
	H335	May cause respiratory irritation
	H400	Very toxic to aquatic life

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling.

#### **HMIS III Rating**

: 2 Moderate Hazard - Temporary or minor injury may occur

1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, Flammability

solids and semi solids having a flash point above 200 F. (Class IIIB)

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT Physical

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

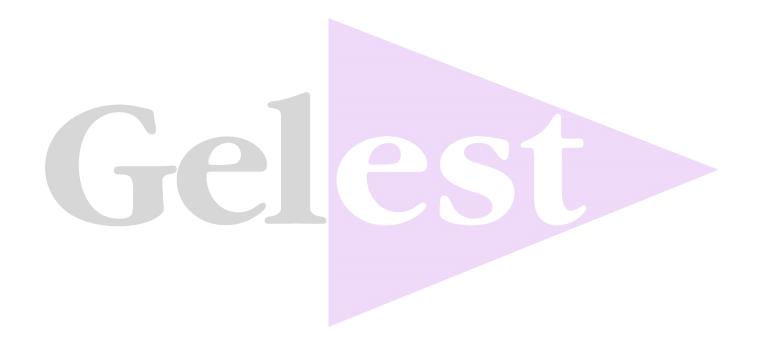
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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