

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

Revision date: 12/15/2014 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
 Trade name : POLYETHYLENE GLYCOL (PEG) 8000  
 CAS No : 25322-68-3  
 Product code : AB01500  
 Formula : H(C<sub>2</sub>H<sub>4</sub>O)<sub>n</sub>HO

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory use/Manufacturing component/Research  
 Use of the substance/mixture : Solvent  
 Chemical intermediate

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

AmericanBio, Inc.  
 15 Erie Dr.  
 Natick, MA 01760 - USA  
 T 800.443.0600 - F 508.655.2754  
[info@americanbio.com](mailto:info@americanbio.com) - [www.americanbio.com](http://www.americanbio.com)

#### 1.4. Emergency telephone number

Emergency number : 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

### SECTION 2: Hazards identification

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

##### Classification (GHS-US)

Not classified

#### 2.2. Label elements

##### GHS-US labeling

No labeling applicable

#### 2.3. Other hazards

No additional information available

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

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
POLYETHYLENE GLYCOL (PEG) 8000 (Main constituent)	(CAS No) 25322-68-3	100	Not classified

Full text of H-phrases: see section 16

#### 3.2. Mixture

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. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

First-aid measures after inhalation	: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Take victim to a doctor if irritation persists. Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. 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 with water. Take victim to an ophthalmologist if irritation persists. Do not apply neutralizing agents. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth with water. Consult a doctor/medical service if you feel unwell. Immediately after ingestion: give lots of water to drink. Ingestion of large quantities: immediately to hospital. Call Poison Information Centre ( <a href="http://www.big.be/antigif.htm">www.big.be/antigif.htm</a> ). Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation	: Slight irritation.
Symptoms/injuries after skin contact	: Slight irritation.
Symptoms/injuries after eye contact	: Slight irritation.

### 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. Alcohol-resistant foam. BC powder. Carbon dioxide. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
unsuitable extinguishing media	: No unsuitable extinguishing media known. Do not use a heavy water stream.

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

Fire hazard	: DIRECT FIRE HAZARD. Not easily combustible. In finely divided state: increased fire hazard. INDIRECT FIRE HAZARD. Temperature above flashpoint: higher fire/explosion hazard.
Explosion hazard	: DIRECT EXPLOSION HAZARD. Fine dust is explosive with air. INDIRECT EXPLOSION HAZARD. Dust cloud can be ignited by a spark.
Reactivity	: On heating/burning: release of carbon monoxide - carbon dioxide. Reacts with (strong) oxidizers. Reacts with (some) acids.

### 5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus. 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. Protective clothing. Dust cloud production: compressed air/oxygen apparatus.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. Evacuate unnecessary personnel.
Measures in case of dust release	: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. Dust production: stop engines and no smoking. In case of dust production: no naked flames or sparks. Dust: spark-/explosionproof appliances/lighting equipment.

#### 6.1.2. For emergency responders

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

### 6.2. Environmental precautions

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

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

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

- For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping over spills.
- Methods for cleaning up : Scoop solid spill into closing containers. Powdered: do not use compressed air for pumping over spills. See "Material-handling" for suitable container materials. Wash clothing and equipment after handling. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

### 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 : Comply with the legal requirements. Clean contaminated clothing. Powdered form: no compressed air for pumping over. Avoid raising dust. Keep away from naked flames/heat. Finely divided: spark- and explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

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

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. 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. ignition sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.
- Storage area : Store in a dry area. Keep container in a well-ventilated place. May be stored under nitrogen. Meet the legal requirements.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
- Packaging materials : SUITABLE MATERIAL: stainless steel. carbon steel. aluminium.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Materials for protective clothing : GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.
- Hand protection : Gloves. Wear protective gloves.
- Eye protection : Safety glasses. In case of dust production: protective goggles. Chemical goggles or safety glasses.
- Skin and body protection : Protective clothing.
- Respiratory protection : Dust formation: dust mask. Wear approved mask.
- Other information : When using, do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

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

- Physical state : Solid
- Appearance : Solid. Crystalline powder. Pellets/tablets.
- Molecular mass : 8000 g/mol
- Color : White.
- Odor : Almost odourless. Characteristic odour.

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

Odor threshold	: No data available
pH	: 4.5 - 7.5 (5 %)
pH solution	: 5 %
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 62 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 265 °C
Self ignition temperature	: > 400 °C
Decomposition temperature	: > 200 °C
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.01 hPa
Relative vapor density at 20 °C	: No data available
Relative density	: 1.0
Density	: 1083 kg/m <sup>3</sup>
Solubility	: Soluble in water. Soluble in alcohols. Soluble in aromatic hydrocarbons. Water: 50 g/100ml
Log Pow	: < 3
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.75 Pa.s (99 °C)
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On heating/burning: release of carbon monoxide - carbon dioxide. Reacts with (strong) oxidizers. Reacts with (some) acids.

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

POLYETHYLENE GLYCOL (PEG) 8000 ( V )25322-68-3	
LD50 oral rat	> 30000 mg/kg (Rat)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified  
pH: 4.5 - 7.5 (5 %)

Serious eye damage/irritation : Not classified  
pH: 4.5 - 7.5 (5 %)

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: Slight irritation.
Symptoms/injuries after skin contact	: Slight irritation.
Symptoms/injuries after eye contact	: Slight irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Mild water pollutant (surface water). Not harmful to fishes (LC50(96h) >1000 mg/l). Not harmful to aquatic organisms (EC50 >1000 mg/l). Insufficient data available on ecotoxicity.

POLYETHYLENE GLYCOL (PEG) 8000 (25322-68-3)	
LC50 fish 1	> 5000 mg/l (24 h; Carassius auratus)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
LC50 fish 2	> 1000 mg/l (96 h; Pisces)
Threshold limit other aquatic organisms 1	100 mg/l (Plankton)
Threshold limit algae 1	500 mg/l (Algae; Chronic)

### 12.2. Persistence and degradability

POLYETHYLENE GLYCOL (PEG) 8000 (25322-68-3)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil. Not established.

### 12.3. Bioaccumulative potential

POLYETHYLENE GLYCOL (PEG) 8000 (25322-68-3)	
Log Pow	< 3
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : 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. Dissolve or mix with a combustible solvent. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water. Dispose in a safe manner in accordance with local/national regulations.

Additional information : Hazardous waste according to Directive 2008/98/EC.

Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

### Additional information

Other information : No supplementary information available.  
State during transport (ADR-RID) : Rail and road transport: not subject to ADR-RID.

### ADR

Transport document description : UN N/A  
Packing group (ADR) : N/A  
Hazard identification number (Kemler No.) : N/A  
Classification code (ADR) : N/A

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### POLYETHYLENE GLYCOL (PEG) 8000 (25322-68-3)

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

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

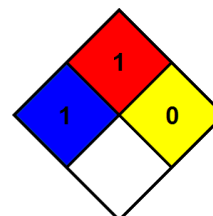
### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

Other information : None.

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.  
NFPA fire hazard : 1 - Must be preheated before ignition can occur.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



# POLYETHYLENE GLYCOL (PEG) 8000

## Safety Data Sheet

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

---

SDS US (GHS HazCom 2012)

*AmericanBio, Inc. does not make any representations, guaranties or warranties as to the accuracy of the information provided in this Safety Data Sheet, which has been provided by a third party, is made in accordance with United States Global Harmonization System (GHS) initiative HAZCOM 2012 (Federal Register, Vol. 77, No. 58, Monday March 26, 2012/Rules and Regulations), and is intended only to describe the product for the purposes of health, safety and environmental requirements. It is expressly understood and agreed that AmericanBio, Inc. shall in no way be deemed or held to be obligated, liable, or accountable upon or under any guaranties or warranties, express or implied, statutory, by operation of law, or otherwise, in any manner or form, including any implied warranty of merchantability or fitness for a particular purpose, that in any way relates to or arises out of the information provided in this Safety Data Sheet.*