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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

Cat. # RC-078

PEG 8000

Size: 1kg



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# PEG 8000

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Revision date: 5/11/2017 Version: 1.1

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

#### 1.1. Product identifier

Product form	: Substance
Substance name	: PEG 8000
Chemical name	: PEG 8000
EC-No.	: 203-473-3
CAS-No.	: 25322-68-3
Product code	: 046P
Type of product	: Pure substance
Formula	: HO(C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> H
Synonyms	: alpha-hydro-omega-hydroxypoly(oxy-1,2-ethanediyl),E1000 / carbowax 1000 / carbowax PEG 1000 / carbowax polyethyleneglycol 1000 / E1000(=polyethyleneglycol 1000) / ethylene oxide,homopolymer,E1000 / macrogol 1000 / PEG 1000 / pluracol E1000 / poly(ethyleneglycol),average molecular weight=1000 / poly(ethyleneglycol)1000 / polyethyleneglycol E1000 / polyethyleneglycol emkapol 1000 / poly-G 1000 / polyglycol 1000 / polyglycol E1000 / polyoxyethylene 1000
Product group	: Raw material
BIG No	: 19496

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

##### 1.2.1. Relevant identified uses

Main use category	: Research purposes
Use of the substance/mixture	: Solvent Chemical intermediate

##### 1.2.2. Uses advised against

No additional information available

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

Geno Technology, Inc./ G-Biosciences  
9800 Page Avenue  
63132-1429 Saint Louis - United States  
T 800-628-7730 - F 314-991-1504  
[technical@GBiosciences.com](mailto:technical@GBiosciences.com) - [www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2: Hazards identification

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

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

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

No labelling applicable

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
PEG 8000	(CAS-No.) 25322-68-3 (EC-No.) 203-473-3	100	Not classified

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### 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.
First-aid measures after skin contact	: Wash immediately with lots of water (15 minutes)/shower. Soap may be used. Do not apply (chemical) neutralizing agents.
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. Take victim to an ophthalmologist. Do not apply neutralizing agents.
First-aid measures after ingestion	: Rinse mouth with water. 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> ).

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

Symptoms/effects	: Irritation of the eye tissue.
Symptoms/effects after inhalation	: Slight irritation.
Symptoms/effects after skin contact	: Slight irritation.
Symptoms/effects after eye contact	: Slight irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Quick-acting ABC powder extinguisher. Class A foam extinguisher. Water (quick-acting extinguisher, reel). Water. Class A foam.
Unsuitable extinguishing media	: Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.

### 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.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Advice for firefighters

Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses. Protective clothing.
Emergency procedures	: Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.
Measures in case of dust release	: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. In case of 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	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment	: Contain released product, pump into suitable containers. Knock down/dilute dust cloud with water spray. Powdered form: no compressed air for pumping over spills.
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Methods for cleaning up	: Scoop solid spill into closing containers. Powdered: do not use compressed air for pumping over spills. Wash down leftovers with plenty of water.
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.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	: Avoid raising dust. Keep away from naked flames/heat. In finely divided state: use spark-/explosionproof appliances. 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. Powdered form: no compressed air for pumping over. Keep container tightly closed.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions	: Store in a well-ventilated place. Keep cool.
Heat and ignition sources	: KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.
Storage area	: Store in a dry area. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. watertight. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

### 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

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

<b>Hand protection:</b>
Gloves
<b>Eye protection:</b>
Safety glasses. In case of dust production: protective goggles
<b>Skin and body protection:</b>
Protective clothing
<b>Respiratory protection:</b>
Dust production: dust mask with filter type P1

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: Solid.
Molecular mass	: 8000 g/mol
Colour	: White.
Odour	: Almost odourless.
Odour threshold	: No data available
pH	: 4 - 7 (5 %)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 36 °C
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: 265 °C
Auto-ignition temperature	: > 400 °C

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Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: < 0.013 hPa (20 °C)
Relative vapour density at 20 °C	: Not applicable
Relative density	: 1.1
Density	: 1083 kg/m <sup>3</sup>
Solubility	: Soluble in water. Soluble in acetone. Soluble in methanol. Soluble in tetrachloromethane. Soluble in aromatic hydrocarbons. Water: 70 g/100ml Acetone: > 100 g/100ml
Log Pow	: < 3
Viscosity, kinematic	: 692.521 mm <sup>2</sup> /s
Viscosity, dynamic	: 0.75 Pa·s (99 °C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable
<b>9.2. Other information</b>	
Other properties	: Hygroscopic. Acid reaction.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Unstable on exposure to moisture.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

PEG 8000 (25322-68-3)	
LD50 oral rat	32000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 20000 mg/kg (Rabbit, Dermal)
Skin corrosion/irritation	: Not classified pH: 4 - 7 (5 %)
Serious eye damage/irritation	: Not classified pH: 4 - 7 (5 %)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

PEG 8000 (25322-68-3)	
Viscosity, kinematic	692.521 mm <sup>2</sup> /s
Potential adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Practically non-toxic in contact with skin (LD50 skin > 2000 mg/kg). Irritant to the eyes.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Slightly harmful to fishes. Mild water pollutant (surface water).
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

#### 12.2. Persistence and degradability

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

Persistence and degradability	Non degradable in the soil.
Chemical oxygen demand (COD)	1.587 g O <sub>2</sub> /g substance

#### 12.3. Bioaccumulative potential

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

Log Pow	< 3
Bioaccumulative potential	No bioaccumulation data available.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods	: Waste treatment methods.
Product/Packaging disposal recommendations	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber 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.
European List of Waste (LoW) code	: 15 01 04 - metallic packaging 15 01 10* - packaging containing residues of or contaminated by dangerous substances 07 01 04* - other organic solvents, washing liquids and mother liquors

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. UN number

UN-No. (ADR)	: Not regulated
UN-No. (IMDG)	: Not regulated
UN-No. (IATA)	: Not regulated
UN-No. (ADN)	: Not regulated
UN-No. (RID)	: Not regulated

#### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not regulated
Proper Shipping Name (IMDG)	: Not regulated
Proper Shipping Name (IATA)	: Not regulated
Proper Shipping Name (ADN)	: Not regulated
Proper Shipping Name (RID)	: Not regulated

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

##### ADR

Transport hazard class(es) (ADR)	: Not regulated
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##### IMDG

Transport hazard class(es) (IMDG)	: Not regulated
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##### IATA

Transport hazard class(es) (IATA)	: Not regulated
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##### ADN

Transport hazard class(es) (ADN)	: Not regulated
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### RID

Transport hazard class(es) (RID) : Not regulated

### 14.4. Packing group

Packing group (ADR) : Not regulated

Packing group (IMDG) : Not regulated

Packing group (IATA) : Not regulated

Packing group (ADN) : Not regulated

Packing group (RID) : Not regulated

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

#### Rail transport

Not regulated

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PEG 8000 is not on the REACH Candidate List

PEG 8000 is not on the REACH Annex XIV List

PEG 8000 is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

PEG 8000 is not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

#### 15.1.2. National regulations

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Safety Data Sheet applicable for regions : GB - United Kingdom

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*