

SAFETY DATA SHEET

Date Updated : August 20, 2020

Version : Rev.200820

Regulation : In accordance with Regulation (EU) 2015/830 (REACH), Annex II

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade Name : ECOPROL H1000

Substance Name : PO3G, Poly(oxy-1,3-propanediyl), α -hydro- ω -hydroxy- (9CI)

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

Relevant identified uses : Polyurethane fiber, Cosmetic additive, Film, Elastomer

Uses advised against : Use for recommended use only.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: SK Chemicals Co., Ltd

Street address/P.O. Box : 686 Sampyeong-dong

Country ID/Postcode/Place : Bundang-gu, Seongnam-si, Gyeonggi-do 463-400, Korea

Telephone number (if possible, indicate telefax) : +82-2-2008-2313

e-mail address of competent person responsible for the SDS : Marketing young-bae.moon@sk.com

National contact : Korea, +82-2-2008-2313

1.4 Emergency Telephone

Emergency Telephone number : +82-2-2008-2313

Opening hours : Not available

Other comments (e.g. language(s) of the phone service) : Not available

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP) : Not classified

2.1.2 Additional information: Not available

2.2 Label elements

Hazard pictograms : Not applicable

Signal word : Not applicable

Hazard statement : Not applicable

Additional precautionary statements : Not applicable

2.3 Other hazards

- Not available

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

CAS No.	EC No.	REACH Registration No.	% [weight]	Name	Classification according to Regulation(EC) No1278/2008(CLP)
345260-48-2	Not available	Not available	≥ 99.8	Poly(oxy-1,3-propanediyl), α -hydro- ω -hydroxy- (9CI)	Not classified

Monomer information :

CAS No.	EC No.	REACH Registration No.	% [weight]	Name
504-63-2	207-997-3	01-2119489383-28-0000	100	1,3-propanediol

SECTION 4 : FIRST-AID MEASURES

4.1 Description of first aid measures

Following inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

Following skin contact

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

Following eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

Following ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

Self-protection of the first aider : Not available

4.2 Most important symptoms and effects, both acute and delayed

Acute effects : Not available

Delayed effects : Not available

4.3 Indication of immediate medical attention and special treatment needed

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 Extinguishing media

- Suitable extinguishing media: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2
- Unsuitable extinguishing media: High pressure water streams

5.2 Special hazards arising from the substance or mixture

- May be ignited by heat, sparks or flames.
- Containers may explode when heated.
- Some of these materials may burn, but none ignite readily.
- Fire will produce irritating and/or toxic gases.
- If inhaled, may be harmful.

5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment: Not available

Emergency procedures:

- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Please note that materials and conditions to avoid.
- Ventilate the area.
- Do not touch or walk through spilled material.
- Prevent dust cloud.

For emergency responders: Not available

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

For containment

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

For cleaning up

- Small Spill; Flush area with flooding quantities of water. And take up with sand or other non-combustible absorbent material and place into containers for later disposal.
- Large Spill; Dike far ahead of liquid spill for later disposal.
- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Other information: Not available

6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

- Please note that materials and conditions to avoid.
- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.
- Be careful to high temperature.

Measures to prevent fire : Not available

Measures to prevent aerosol and dust generation : Not available

Measures to protect the environment : Not available

Advice on general occupational hygiene

- Wash thoroughly after handling.
- Please work with reference to engineering controls and personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

- Store in a closed container.
- Store in cool and dry place.

Packaging materials : Not available

Requirements for storage rooms and vessels

- Store in a closed container.
- Store in cool and dry place.

Further information on storage conditions : Not available

7.3 Specific end use(s)

Recommendations : Not available

Industrial sector specific solutions : Not available

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limits

Name	ACGIH regulation	Biological exposure index	OSHA regulation	NIOSH regulation	EU regulation
Poly(oxy-1,3-propanediyl), α -hydro- ω -hydroxy- (9CI)	Not applicable	Not available	Not applicable	Not applicable	Not applicable

8.2 Exposure controls

8.2.1 Appropriate engineering controls :

Substance/mixture related measures to prevent exposure during identified uses: Not available

Structural measures to prevent exposure: Not available

Organizational measures to prevent exposure: Not available

Technical measures to prevent exposure

- Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

8.2.2 Individual protection measures, such as personal protective equipment :

Eye and face protection

- Wear facepiece with goggles to protect.

- An eye wash unit and safety shower station should be available nearby work place.

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.

- An eye wash unit and safety shower station should be available nearby work place.

Skin protection

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

Hand protection

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Other skin protection: Not available

Respiratory protection

- Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment when necessary.

- In case exposed to particulate material, the respiratory protective equipments as follow are recommended. ;facepiece filtering respirator or air-purifying respirator, high-efficiency particulate air(HEPA) filter media or respirator equipped with powered fan, filter media of use(dust, mist, fume)

- In lack of oxygen(< 19.5%), wear the supplied-air respirator or self-contained breathing apparatus.

oxygen

Thermal hazards : Not available

8.2.3 Environmental exposure controls : Not available

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Description : Liquid or waxy solid

Color : Colorless

Odor : None

Odor threshold : Not available

pH : 7.0 ~ 7.5

Melting point/freezing point : 12 ~ 14 °C

Initial boiling point and boiling range : > 220 °C

Flash point : Not available

Evaporation rate : Not available

Flammability (solid, gas) : Not available

Upper/lower flammability or explosive limits : Not available

Vapor pressure : Not available

Solubility (ies) :

- **Water :** Not available

- **Other solvent :** Not available

Vapor density : Not available

Relative density : Not available
Partition coefficient: n-octanol/water : Not available
Auto ignition temperature : Not available
Decomposition temperature : Not available
Viscosity : 400~600 cps
Explosive properties : Not available
Oxidizing properties : Not available
Molecular weight : 900 ~ 1100 g/mol
9.2 Other information : Not available

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity

- Combustible agents

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- No hazardous reactions under ordinary conditions of use and storage
- Containers may explode when heated.
- Fire may produce irritating and/or toxic gases.
- Some liquids produce vapors that may cause dizziness or suffocation.
- Inhalation of material may be harmful.

10.4 Conditions to avoid

- Heat, sparks or flames

10.5 Incompatible materials

- Strong combustible substances

10.6 Hazardous decomposition products

- Irritating and/or toxic gases

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity;	
Oral	Rat, LD ₅₀ > 2000 mg/kg (Female)
Dermal	Not available
Inhalation	Not available
(b) Skin Corrosion/ Irritation;	Non-irritant with Rabbit
(c) Serious Eye Damage/ Irritation;	Non-irritant with Rabbit
(d) Respiratory sensitization;	Not available
(e) Skin Sensitization;	Not skin sensitizer with Guinea pig
(f) Carcinogenicity;	Not available
(g) Mutagenicity;	Not available
(h) Reproductive toxicity;	Not available
(i) Specific target organ toxicity (single exposure);	Not available
(j) Specific target organ toxicity (repeat exposure);	Not available
(k) Aspiration Hazard;	Not available

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity Fish:
 - 24hr-LC₅₀(*Oncorhynchus mykiss*) > 120 mg/L

	Crustacean:
	- 48hr-EC ₅₀ (<i>Daphnia magna</i>) = 100 mg/L
	Algae:
	- 72hr-EbC ₅₀ (<i>Pseudokirchneriella subcapitata</i>) > 120 mg/L
Chronic toxicity	Not available
12.2 Persistence and Degradability	Persistence : Not available Degradability : Not available Bioaccumulation : Not available
12.3 Bioaccumulative potential	Biodegradation : - The product is not readily biodegradable according to OECD criteria but is inherently biodegradable.
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not available
12.6 Other adverse effects	Not available

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product/Packaging disposal

- Waste from residues : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
- Container : Consider the required attentions in accordance with waste treatment management regulation.

Waste codes / Waste designation according to LoW(2015) : Not available

Waste treatment-relevant information

- Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Sewage disposal-relevant information: Not available

Other disposal recommendations: Not available

SECTION 14 : TRANSPORT INFORMATION

14.1 UN Number : Not applicable

14.2 UN Proper shipping name : Not applicable

14.3 Transport Hazard class : Not applicable

14.4 Packing group : Not applicable

14.5 Environmental hazards : Not applicable

14.6 Special precautions for user

in case of fire : Not applicable

in case of leakage : Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not Available

This material is not classified as dangerous under IATA regulations

This material is not classified as dangerous under IMDG regulations

This material is not classified as dangerous under ADR regulations

SECTION 15 : REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

EU Regulatory Information

EU classification :

EU CLP 2008 :

Classification : Not regulated

Hazard statement codes : Not applicable

Precautionary statement codes : Not applicable
EU SVHC list : Not regulated
EU Authorisation List : Not regulated
EU Restriction list : Not regulated

Foreign Regulatory Information

External information :

U.S.A management information (OSHA Regulation) : Not regulated
U.S.A management information (CERCLA Regulation) : Not regulated
U.S.A management information (EPCRA 302 Regulation) : Not regulated
U.S.A management information (EPCRA 304 Regulation) : Not regulated
U.S.A management information (EPCRA 313 Regulation) : Not regulated
Korea management information : Not regulated
Substance of Roterdame Protocol : Not regulated
Substance of Stockholme Protocol : Not regulated
Substance of Montreal Protocol : Not regulated

15.2 Chemical safety assessment : In accordance with REACH Article 14, a Chemical Safety Assessment has been carried out for this substance.

SECTION 16 : OTHER INFORMATION

Product safety data sheet for ECOPROL H1000 prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II

16.1 Indication of changes

Date Updated : 22. Mar. 2016

Version : Rev.00

16.2 Abbreviations and acronyms

ACGIH = American Conference of Government Industrial Hygienists
CLP = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008
CAS No. = Chemical Abstracts Service number
DMEL = Derived Minimal Effect Levels
DNEL = Derived No Effect Level
EC Number = EINECS and ELINCS Number (see also EINECS and ELINCS)
EU = European Union
IARC = International Agency for Research on Cancer
ISHL = Industrial Safety & Health Law
NIOSH = National Institute for Occupational Safety & Health
NTP = National Toxicology Program
OSHA = European Agency for Safety and Health at work
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC(s) = Predicted No Effect Concentration(s)
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 453/2010
STP = Sewage Treatment Plant
SVHC = Substances of Very High Concern
vPvB = Very Persistent and Very Bioaccumulative
UN = United Nations
MARPOL = International Convention for the Prevention of Pollution from Ships (IMO)
IBC = Intermediate Bulk Container
CERCLA = Comprehensive Environmental Response, Compensation & Liability Act (US)
EPCRA = Emergency Planning and Community Right-to-Know Act (US)
EINECS = European Inventory of Existing Commercial chemical Substances
ELINCS = European List of Notified Chemical Substances

16.3 Key literature reference and sources for data :

SK Chemical Data
EU CLP; <https://echa.europa.eu/information-on-chemicals/cl-inventory-database>
NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>
National Toxicology Program; <http://ntp.niehs.nih.gov/results/dbsearch/>
American Conference of Governmental Industrial Hygienists TLVs and BEIs.

