POLY-G® 540-555

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 8/29/2025 Revision date: 8/29/2025 Supersedes: 9/27/2020 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form	:	Substance
Trade name	:	POLY-G® 540-555
Chemical name	:	Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1)
IUPAC name	:	Pentaerythritol, propoxylated
CAS-No.	:	9051-49-4
Formula	:	(C3H6O)n(C3H6O)n(C3H6O)n(C3H6O)nC5H12O4

1.2. Other means of identification

Synonyms	:	Pentaerythritol, propoxylated / Ether of tetrakis{.alpha.-hydro-.omega.-hydroxypoly[oxy(methylethylene)]} and 2,2-bis(hydroxymethyl)propane-1,3-diol / PPG pentaerythritol ether
EC-No.	:	500-030-9

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	:	Chemical intermediate

1.4. Supplier's details

Monument Chemical
2450 Olin Road
Brandenburg, KY, 40108
USA
T (270)422-6860
sds@monumentchemical.com - www.monumentchemical.com

1.5. Emergency phone number

Emergency number	:	24 HR CHEMTREC: 1-800-424-9300 (International +1 703-741-5970); 24 HR Emergency Assistance: 1-270-422-6860

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

According to the corresponding national regulations there is no labelling obligation for this product.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Substance type : Polymer

Name	Product identifier	%
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (Main constituent)	CAS-No.: 9051-49-4	99 – 100

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 necessary first-aid measures

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

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : 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 immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation : No effects known.

Symptoms/effects after skin contact : Slight irritation.

Symptoms/effects after eye contact : Slight irritation.

Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa.

Chronic symptoms : No effects known.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : DIRECT FIRE HAZARD: Combustible. INDIRECT FIRE HAZARD: Temperature above flashpoint: higher fire/explosion hazard.

Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire	:	Exposure to fire/heat: keep upwind. Exposure to fire/heat: seal off low-lying areas. 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. Prevent fire-fighting water from entering environment.
Protection during firefighting	:	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

For non-emergency personnel

Protective equipment	:	Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).
Emergency procedures	:	Evacuate unnecessary personnel.

For emergency responders

Protective equipment	:	Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.
Environmental precautions	:	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	:	Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.
Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

See Heading 8. Exposure controls and personal protection.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	:	Observe normal hygiene standards.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Storage area	:	Store in a dry area. Ventilation at floor level. Meet the legal requirements.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight.
Information on mixed storage	:	KEEP SUBSTANCE AWAY FROM: oxidizing agents.
Heat-ignition	:	KEEP SUBSTANCE AWAY FROM: heat sources.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: carbon steel. stainless steel. HDPE. LDPE (Low Density Poly Ethylene).

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Wear protective gloves.

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Protective clothing (EN 14605 or EN 13034)

Respiratory protection:
Wear appropriate mask

Personal protective equipment symbol(s):

Other information:
Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Colorless to pale yellow liquid.
Color	:	Colourless to yellow
Odor	:	mild
Odor threshold	:	No data available
pH	:	4 – 7 10/6 Isopropanol / water (@ 25 Deg. C)
Melting point	:	< -100 °C (EU Method A.1: Melting/freezing point)
Freezing point	:	No data available
Boiling point	:	355.4 °C (EU Method A.2: Boiling point)
Flash point	:	185 °C (closed cup)
Flammability (solid, gas)	:	Non flammable.
Vapor pressure	:	0.000000118 hPa (20 °C, OECD 104: Vapour Pressure)
Relative vapor density at 20°C	:	> 10
Relative density	:	1 – 1.1
Density	:	8.3 – 9.2 lb/gal
Solubility	:	Soluble in water. Water: 22 °C, miscible, OECD 105: Water Solubility
Partition coefficient n-octanol/water (Log Pow)	:	-1.81 – 0.22 (Calculated, 25 °C)
Auto-ignition temperature	:	365 °C (EU Method A.15: Auto-ignition Temperature (liquids and gases), T2)

Decomposition temperature	:	No data available
Viscosity, kinematic	:	3746.361 – 4152.593 mm²/s
Viscosity, dynamic	:	4130 mPa·s (20 °C, OECD 114: Viscosity of Liquids)
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content	:	0 %
Other properties	:	Gas/vapour heavier than air at 20°C. Hygroscopic. Slightly volatile.

SECTION 10 Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

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

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
LD50 oral rat	20800 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	20800 mg/kg body weight

Skin corrosion/irritation	:	Not classified pH: 4 – 7 10/6 Isopropanol / water (@ 25 Deg. C)
Serious eye damage/irritation	:	Not classified pH: 4 – 7 10/6 Isopropanol / water (@ 25 Deg. C)
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
NOAEL (oral,rat,90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
Viscosity, kinematic	3746.361 – 4152.593 mm²/s

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.
Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation : No effects known.
Symptoms/effects after skin contact : Slight irritation.
Symptoms/effects after eye contact : Slight irritation.
Symptoms/effects after ingestion : Irritation of the gastric/intestinal mucosa.
Chronic symptoms : No effects known.

SECTION 12 Ecological information

12.1. Ecotoxicity

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). Photolysis 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. Not harmful to activated sludge. Slightly harmful to algae.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
LC50 - Fish [1]	> 1000 mg/l Pimephales Promelas
EC50 - Crustacea [1]	≥ 100 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
Partition coefficient n-octanol/water (Log Pow)	-1.81 – 0.22 (Calculated, 25 °C)
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)	
Surface tension	0.03735 N/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	< 1.25 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

Other information : Avoid release to the environment.

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

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

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

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

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active 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.

15.2. International regulations

CANADA

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1) (9051-49-4)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

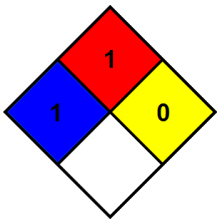
15.3. State regulations

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

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Revision date : 8/29/2025

Issue date	:	8/29/2025
Other information	:	None.
NFPA health hazard	:	1 - Materials that, under emergency conditions, can cause significant irritation.
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.



Safety Data Sheet (SDS), USA

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