

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 25322-68-3 (PEG 600)
Product Name: Polyethylene Glycol 600
Revision Date: Apr 12, 2018 **Date Printed:** Nov 24, 2021
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture according to United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0025322-68-3	POLYETHYLENE GLYCOL	100% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality or to reflect batch to batch variation.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

Skin Contact

Wash with plenty of water. Remove and isolate contaminated clothing and shoes.

Ingestion

Do not induce vomiting. Do not give anything by mouth to an unconscious individual. If vomiting occurs naturally, lie on your side, in the recovery position. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Most Important Symptoms and Effects, Both Acute and Delayed

No data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO₂)

Unsuitable Extinguishing Media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards in Case of Fire

Carbon monoxide and carbon dioxide.

Special Protective Actions

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods and Materials for Containment and Cleaning up

Prevent further leakage or spillage if safe to do so. Keep in suitable, closed containers for disposal. Pick up and transfer to properly labeled containers.
Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7) HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Protect from sunlight. Store in a well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Packaging materials:
high density polyethylene. low density polyethylene. polypropylene. stainless steel 304/307.
stainless steel 316.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear safety glasses with side shields

Skin Protection

PVC apron. Protective shoes or boots. Hand Protection: Wear suitable gloves. PVC(Polyvinyl chloride).
Skin & Body Protection: PVC apron. Protective shoes and boots.

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Appropriate Engineering Controls

Showers, Eyewash stations, ventilation systems.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "CAN_AL_Carcinogen", "CAN_AL_Notation", "CAN_ALsmg", "CAN_ALsppm", "CAN_ALtmg", "CAN_ALtppm", "CAN_ONsmg", "CAN_ONsppm", "CAN_ONtmg", "CAN_ONtppm", "CAN_QCVECDmg - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_mg", "CAN_QCVECDppm - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_ppm", "CAN_QCVEMPmg - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_mg", "CAN_QCVEMPppm - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_ppm", "CANsmg", "CANsppm", "CANtmg", "CANtppm", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHA_sppm", "OSHA_tmg", "OSHA_tppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	1.13 g/cm3
Specific Gravity	1.13
Appearance	Liquid @25°C
Odor Description	No Information available
Odor Threshold	No Information available
pH	4.5 - 7.0; 5%
Melting Point	2-2.5 °C
Low Boiling Point	no data available
High Boiling Point	>250 °C
Flash Point	200.00 °C
Vapor Pressure	< 0.35 at 25°C mmHg
Vapor Density	N/A
Evaporation Rate	no data available
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	complete
Coefficient Water/Oil	no data available
Viscosity	120-130 cSt@25 °C

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No hazardous reactivity is expected.

Possibility of hazardous reactions

None under normal processing. Hazardous polymerization does not occur.

Stability

Stable under normal storage and handling conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight. Keep away from flames and sparks. Keep away from heat and sources of ignition. Incompatible materials, exposure to moist air or water

Hazardous Reactions/Polymerization

Hazardous Polymerization: Will not occur

Incompatible Materials

Combustible materials, oxidizing agents, (strong) acids, metals, water/moisture.

Hazardous Decomposition Products

Carbon monoxide & Carbon dioxide

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Polyethylene glycol:

Oral LD50= 22 G/KG (Rat)

Dermal > 20 g/kg(Rabbit)

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

No data available

Carcinogenicity

No tumorigenic effect was produced in mice after intravaginal contact for 1 year. TDLo: 416 mg/kg.

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Negative.50 pph, hamster; 25 mmol/L, 3h, hamster (+S9); 3 mmol/L - 7 mmol/L, 16h, hamster; 100 g/L, other microorganisms.

Reproductive Toxicity

No effect was produced in pregnant rabbits (6-18 days)after ingestion. TDLo: 130 mg/kg.

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

No Data available

Serious Eye Damage/Irritation

Mild irritation (500 mg/24h, rabbit).

Skin Corrosion/Irritation

Non-irritant.

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met. Toxicological reports have suggested an acceptable daily intake of PEG for human estimated up to 10 mg/kg or 0.7 g/70-kg human/day. For low molecular weight PEGs, this acceptable dose could, in theory, give rise to a systemic (absorbed) dose of approximately 400 mg/day.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met. Ingestion of very large doses has produced death in animals due to renal damage. Feeding studies with rats for 90 days at 8% concentration in the diet produced no effect. However, 16% produced decreased body weight and increased kidney weights.

Likely Routes of Exposure

Inhalation: Specific test data for the substance or mixture is not available.

Eye Contact: Specific test data for the substance or mixture is not available.

Skin Contact: Causes mild skin irritation.

Ingestion: Specific test data for the substance or mixture is not available.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Acute toxicity (fish, PISCES) LC50: >1000 mg/l 96h
Acute toxicity other aquatic organisms LC50: >1000 mg/l 96h
Based on available data, the classification criteria are not met.

Mobility in Soil

No data available.

Bioaccumulative Potential

Low potential for bioaccumulation (Log Kow <=3).

Persistence and Degradability

Not readily degradable in water.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws. Waste management should be in full compliance with national, state and local laws.

SECTION 14) TRANSPORT INFORMATION

Transport Canada Information

Hazard class: N/A
Proper shipping name: N/A
UN number: Not Regulated
Packaging group: N/A

U.S. DOT Information

UN number: Not Regulated
Proper shipping name: N/A
Hazard class: N/A
Packaging group: N/A

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0025322-68-3	POLYETHYLENE GLYCOL	100% - 100%	DSL,TSCA,EU_EC_Inventory - European_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANTmg or CANTppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

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