



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

# MATERIAL SAFETY DATA SHEETS

## SECTION I

### PRODUCT AND COMPANY IDENTIFICATION

**Product: Polyethylene glycol 300**  
**This MSDS is valid for all grades and catalog #'s**

Synonyms: Polyglycol E-300  
Formula: H(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>OH or (C<sub>2</sub>-H<sub>4</sub>-O)<sub>n</sub>-H<sub>2</sub>-O  
Manufacturer: PHARMCO-AAPER  
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Brookfield, Connecticut 06804, USA  
Phone (203) 740-3471  
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Shelbyville, KY 40065  
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CHEMTREC 1-800-424-9300

## SECTION II

### COMPOSITION /INFORMATION ON INGREDIENTS

% by weight	Material	CAS #	TLV/PEL	LC50/LD50
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100	Polyethylene	25322-68-3	TWA: 10 (mg/m <sup>3</sup> ) from AIHA	ORAL (LD50): Acute: 27500 mg/kg [Rat]. 3100 mg/kg [Mouse]. DERMAL (LD50): Acute: >20000 mg/kg [Rabbit].
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## SECTION III

### HAZARDS IDENTIFICATION

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

## SECTION IV

### FIRST AID

Obtain medical attention for all cases of over-exposure.

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Hazardous Skin Contact:** Not available.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Hazardous Inhalation:** Not available.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Hazardous Ingestion:** Not available.

## SECTION V

### FIRE FIGHTING MEASURES

**Fire:**

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition temperature: Not available.

Flash point: OPEN CUP: 199°C (390.2°F).

Flammable limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards:** Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Extinguishing Media:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Information:** Not available.

## SECTION VI

### SPILL/ACCIDENTAL RELEASE MEASURES

**Small Spill:** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste

disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

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## SECTION VII HANDLING AND STORAGE

**Precautions:** Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

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## SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:** Safety glasses. Synthetic apron or Lab coat. Gloves (impervious). Respiratory Protection: Adequate general room ventilation or local exhaust ventilation is sufficient for normal handling at room temperature. Also, respiratory protection is not necessary for normal handling at room temperature since exposure to vapor is minimal due to low vapor pressure. If room ventilation is inadequate and/or if handling of material generates airborne concentrations of mist or vapor above the recommended exposure guidelines, a vapor respirator may be necessary.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** TWA: 10 (mg/m<sup>3</sup>) from AIHA  
Consult local authorities for acceptable exposure limits.

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## SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

**Physical State/Appearance:** Liquid. (viscous)

**Molecular Weight:** 285 – 315 (avg. 300) g/mole

**Odor:** Odorless

**Taste:** Not available

**Color:** Clear

**pH (1% Solution in Water):** Not available

**Boiling Point:** >200°C (392°F)

**Melting Point:** -15°C (5°F) - -8 C(18 F)

**Critical Temperature:** Not available.

**Specific Gravity:** 1.125 - 1.127 (Water = 1)

**Vapor Pressure (mm Hg):** <0 kPa (@ 20°C)

**Vapor Density (Air=1):** >10 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Water/Oil Dist. Coefficient:** Not available.

**Ionicity (in water):** Not available.

**Dispersion Properties:** See solubility in water.

**Solubility:** Easily soluble in cold water, hot water.

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## SECTION X STABILITY/REACTIVITY INFORMATION

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials (strong oxidizing agents), dust generation, excess heat.

**Incompatibilities:** Reactive with oxidizing agents.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Information:** Slightly Hygroscopic

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## SECTION XI TOXICOLOGICAL INFORMATION

**Routes of Entry:** Absorbed through skin. Eye contact.

**Toxicity to Animals:** Acute oral toxicity (LD50): 19600 mg/kg [Guinea pig]. Acute dermal toxicity (LD50): >20000 mg/kg [Rabbit].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

**Special Information on Toxicity to Animals:** Lethal Dose/Conc 50% Kill: LD50[Rabbit] - Route: Oral; Dose: 17300 mg/kg

**Special Information on Chronic Effects/Toxicity on Humans:** This product contains trace amounts of the following which may cause cancer: Acetaldehyde (<=0.0006%) 1,4-Dioxane (<=0.0005%) Formaldehyde (<=0.0004%) Ethylene Oxide (0.0005%) This product contains trace amounts of the following which may cause reproductive harm: Ethylene Oxide (<0.0005%) Acute Potential Health Effects: Skin: May cause mild skin irritation. It can be absorbed through the skin. Eyes: May cause mild, temporary eye irritation. Corneal injury is unlikely. Inhalation: Low hazard. At room temperature, exposure to vapor is minimal due to low volatility (vapor pressure). If product is heated, inhalation of vapor may cause respiratory tract irritation. Ingestion: Low hazard. Low toxicity. May cause gastrointestinal tract irritation which may include nausea and vomiting. May affect urinary system. Chronic Potential Health Effects: Chronic occupational exposure is mainly limited to dermal contact. Prolonged or repeated contact may cause delayed eczematous and immediate uticular reactions, and contact dermatitis. Ingestion: Prolonged or repeated ingestion may affect urinary system (kidney, ureter, or bladder), liver, metabolism(weight loss).

## SECTION XII ECOLOGICAL INFORMATION

**Ecotoxicity:** Ecotoxicity in water (LC50): >5000 mg/l 24 hours [Goldfish].

**BOD5 and COD:** Not available.

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Information on Products of Biodegradation:** Not available.

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## SECTION XIII DISPOSAL CONSIDERATIONS

**Waste Disposal:** Recycle, if possible. Consult your local or regional authorities.

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## SECTION XIV TRANSPORTATION INFORMATION

**DOT Classification:** DOT Not a DOT controlled material (United States).

**UN:** Not applicable.

**Special Provisions for Transport:** Not applicable.

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## SECTION XV REGULATORY INFORMATION

**Federal and State Regulations:** Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are: **NONE**

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: **NONE**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: **Acetaldehyde; 1,4-Dioxane; Formaldehyde; Ethylene Oxide**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: **No products were found.**

**Other Classifications:**

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): This product is not classified according to the EU regulations.

**Protective Equipment:** Gloves. Synthetic apron. Safety glasses.

**References:** Not available.

**Other Special Considerations:** Not available.

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The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.