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Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)
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POLYETHYLENE GLYCOL

1. Product Identification

Synonyms: PEG; Polyethylene glycol 200, 300, 400, 600,1000,4000,6000
CAS No.: 25322-68-3
Molecular Weight: Not applicable to mixtures.
Chemical Formula: $(C_2H_4O)_nH_2O$
Product Codes: 39342 , 39343 , 39344 , 39345 , 32538 , 045123

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Polyethylene Glycol	25322-68-3	90 - 100%

3. Hazards Identification

Potential Health Effects

Inhalation: No adverse health effects expected from inhalation.
Ingestion: Large doses of the lower molecular weight products may cause gastro-intestinal upset.
Skin Contact: No adverse effects expected.
Eye Contact: No adverse effects expected.
Chronic Exposure: No information found.
Aggravation of Pre-existing Conditions:Damaged skin.

4. First Aid Measures

Inhalation: Not expected to require first aid measures.
Ingestion: If large amounts were swallowed, give water to drink and get medical advice.
Skin Contact: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.
Eye Contact: In case of contact, flush eyes with plenty of water for at least 15 minutes.
Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire Extinguishing Media:
Fire: Not considered a fire hazard
Explosion: Not considered a explosion hazard.
Water spray, dry chemical, alcohol foam, or carbon dioxide.
Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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6. Accidental Release Measures
Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.
Solid Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.
Liquid Spills: Absorb with vermiculite, dry sand, earth or similar material and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer.

7. Handling and Storage
Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids, vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection
Airborne Exposure Limits:
AIHA Workplace Environmental Exposure Level (WEEL):
Polypropylene glycols: 8-hour TWA: 10 mg/m3, as an aerosol
Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Respirators (NIOSH Approved): For use with solids (not required for liquids): If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants,cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure, air-supplied respirator.
Skin Protection: Wear protective gloves and clean body-covering clothing.
Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties
Appearance: Clear liquid or white solid.
Odor: Mild odor.
Solubility: Soluble in water.
Density: range: 1.1 to 1.2 (increases as molecular weight increases)
pH: No information found.
% Volatiles by volume @ 21C (70F): No information found.
Boiling Point: No information found.
Melting Point: Melting point increases as molecular weight increases: PEG 400 = 4-8C (39-46F)
PEG 600 = 20-25C (68-77F) PEG1500 = 44-48C (111-118F) PEG 4000 = 54-58C (129-136F)
PEG 6000 = 56-63C (133-145F)

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Vapor Density (Air=1): No information found.
Vapor Pressure (mm Hg): Vapor pressure is very low; as molecular weight increases, vapor pressure decreases.
Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity
Stability: Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.
Hazardous Polymerization: Will not occur.
Incompatibilities: Incompatible with polymerization catalysts (peroxides, persulfates) and accelerators, strong oxidizers, strong bases and strong acids.
Conditions to Avoid: Incompatibles.

11. Toxicological Information
Oral Rat LD50 for:PEG 200 = 28gm/kg; PEG 300 = 27.5gm/kg; PEG 400 = 30.2gm/kg; PEG 600 = 30gm/kg; PEG 1000 = 32gm/kg; PEG 1450 = > 4gm/kg; PEG 4000 = 50gm/kg; PEG 6000 = > 50gm/kg; PEG 20000 = 31.6gm/kg
Polyethylene glycol has been investigated as a mutagen; PEG 1000 has been investigated as a tumorigen.
--------\Cancer Lists\----------
---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Polyethylene Glycol (25322-68-3)	No	No	None

12. Ecological Information
Environmental Fate: No information found.
Environmental Toxicity: No information found.

13. Disposal Considerations
Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information
Not regulated.

15. Regulatory Information
Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture
REACH Restrictions: The components of this product are not subject to restrictions.
REACH Authorisation: The components of this product are not subject to authorization.
Chemical Safety Assessment: It has not been carried out.

16. Other Information
Product Use:
Laboratory Reagent

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