

1. Product Identification.

Synonyms: PEG 400
CAS No: 025322-68-3
NFPA code: 0-1-0
Molecular weight: 385/415
RTECS no: TQ36750000
Formula: $\text{HO}(\text{C}_2\text{H}_4\text{O})_n\text{H}$

2. Composition/ Information on Ingredients.

Hazardous ingredients:	CAS no:	Conc. in %	Hazard class	Risk (r-phrases):
Polyethylene glycol 400	025322-68-3	> 99	--	--

3. Hazards Identification.

No hazard classification.

4. First Aid Measures.

Eye contact: Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Consult a doctor/medical service if irritation persists.

Skin contact: Wash immediately with lots of water and soap (15 mins.). Consult a doctor/medical service if irritation persists. Do not apply (chemical) neutralizing agents.

After inhalation: Unconscious: maintain adequate airway and respiration. Remove the victim into fresh air. Consult medical service if breathing problems develop.

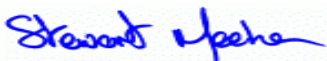
After ingestion: Never give water to an unconscious person. Consult a doctor/medical service if you feel unwell. Immediately after ingestion; give lots of water to drink. Well-conscious victim: immediately induce vomiting.

5. Fire Fighting Measures.

Suitable extinguishing media: Water spray, foam, powder and carbon dioxide.

Unsuitable extinguishing media: Container may slop over if solid jet is applied.

Special exposure hazards: On heating/burning: release of harmful/irritant gases/vapours: carbon monoxide – carbon dioxide.



Instructions: Cool tanks/drums and remove them to safety.

Precautions for fire fighters: Heat/fire exposure: compressed air/oxygen apparatus. Protective clothing for exposure to chemicals.

6. Accidental Release Measures.

Personal protection: See section 8.

Environmental precautions: Collect/pump leaking substance into suitable containers. Plug the leak, cut off the supply.

Clean-up: Take up liquid spill into an adsorbent agent e.g.: sand/earth. Scoop the adsorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

7. Handling & Storage.

Handling: Reduce/avoid exposure and/or contact. Keep container tightly closed. Clean contaminated clothing. Comply with the legal requirements.

Storage: Store in a dry area. Ventilation at floor level. May be stored under nitrogen. Storage temperature: < 50°C.

Materials for packaging: Suitable: Stainless steel, carbon steel.
Unsuitable: Copper.

8. Exposure Controls and Personal Protection.

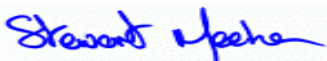
Recommended engineering controls: On heating: work under local exhaust/ventilation.

Exposure limits: TLV value: not listed. Mg/m³: not listed.

Personal protection: Eye protection: Safety glasses.
Skin protection: Gloves, protective clothing.
Respiratory protection: On heating: gas mask.

9. Physical and Chemical Properties.

Appearance (at 20°C): Liquid.
Odour: Characteristic.
Colour: Colourless.





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pH value:	4.5/7.0 (5% in water)
Boiling point/range:	Not determined.
Melting point/range:	4/8 °C
Flashpoint:	176°C
Auto-ignition point:	360°C
Explosion limits:	Not determined.
Vapour pressure (at 20°C):	< 0.1 hPa
Relative density (at 20°C):	1.126
Water solubility:	Completely.
Soluble in:	Ethanol, acetone, ethyl acetate, aromatic hydrocarbons.
Relative vapour density:	> 1
Saturation concentration:	Not determined.
Viscosity (100°C):	7.995/8.558 mPa.s

10. Stability & Reactivity.

Stability:	Unstable on exposure to moisture.
Reactivity:	On heating/burning: release of harmful/irritant gases/vapours: carbon monoxide – carbon dioxide. Hydrolyse on exposure to (strong) acids.

11. Toxicological Information.

Acute toxicity:	LD ₅₀ oral rat:	> 30000 mg/kg
	LD ₅₀ dermal rat:	Not determined.
	LD ₅₀ dermal rabbit:	> 20000 mg/kg
	LC ₅₀ inhalation rat:	Not determined.

Routes of exposure: Inhalation, ingestion, skin and eye contact.

Acute effects/symptoms: Slightly irritant to eyes. Exposure to high concentrations: irritation of the respiratory tract/coughing, redness of the eyes tissue and the nasal mucous membranes.

Chronic effects: Dry skin.

12. Ecological Information.

Biodegradation: Soil: T_{1/2}: Not determined.
BOD₅: 0.01 g O₂/g substance.
COD: 1.72 g O₂/g substance.

Water: Not readily biodegradable. Test: 53%, 28d, MITI I, > 90%, 10d, OECD 302B).

Bioaccumulation: Not bioaccumulative.
Aquatic toxicity: LC₅₀ (24h): > 5000 mg/l (CARASSIUM AURATUS).
Other information: WGK: 1 (002)

13. Disposal Considerations.

Provisions relating to waste: Waste code (EC): 07 01 04. Hazardous waste: (91/689/EG).
Disposal methods: Landfill or incinerate at an approved site in accordance with national and local regulations. Recycle by distillation. Remove to an authorised waste incinerator for solvents. Do not discharge into surface waters.

14. Transport Information.

This product is not restricted for any mode of international transport.

15. Regulatory Information.

Labelling in accordance with EC directives 67/548/Eec and 1999/45/EC.

16. Other Information.

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POLYETHYLENE GLYCOL 400

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Date of Issue: 25/02/04

Revision 0