



1 Identification

Product identifier Product name: Polypropylene glycol 400

Stock number: 40811 CAS Number: 25322-69-4 NLP Number: 500-039-8 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. Inerrito Fisher Scheman C. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified as hazardous according to 29 CFR 1910 (OSHA GHS). Hazards not otherwise classified No information known.

I abel elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 0Flammability = 1

Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 25322-69-4 Polypropylene glycol 400 Identification number(s): NLP Number: 500-039-8

4 First-aid measures

Description of first aid measures

After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dióxide Advice for firefighters

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow product to reach sewage system or any water course. Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Prevention of secondary hazards: No special measures required.

Product name: Polypropylene glycol 400

Reference to other sections

See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling

Frecautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed containers.

Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities

Storage Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data

Exposure controls Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintai an ergonomically appropriate working environment

Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Recommended filter device for short term use: Use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU) CEN (EU).

Protection of hands:

Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Material of gloves Nitrile rubber, NBR Penetration time of glove material (in minutes) 480 Glove thickness 0.11 mm

Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and chemical properties

9 Physical and chemical properties	
Information on basic physical and che General Information Appearance: Form: Odor: Odor: Odor threshold:	emical properties Liquid Not determined Not determined.
pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined Not determined Not determined Not determined Not determined
Danger of explosion: Explosion limits:	Not determined.
Lower:	Not determined
	Not determined
Vapor pressure:	Not determined
Density: Relative density	Not determined Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	Net de terreire ed
dynamic: kinematic:	Not determined. Not determined.
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

(Contd. of page 1)

	Re	evision date 11/03/2016
Product name: Polypropylene glycol 400		
Possibility of hazardous reactions Reacts with strong oxidiz Conditions to avoid No further relevant information available Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and		(Contd. of page 2)
LD/LC50 values that are rélevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: Specific target organ system toxicity - single exposure: No Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.	erties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. No effects known. o effects known. wledge the acute and chronic toxicity of this substance is not fully known.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information Bioaccumulative potential No further relevant information av Mobility in soil No further relevant information: Additional ecological information: General notes: Avoid transfer into the environment. Results of PBT and vPVB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information availab	ailable.	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations Uncleaned packagings: Recommendation: Disposal must be made according to office		
14 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, IMDG, IATA	Not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 a Transport/Additional information:	and the IBC Code Not applicable.	
DOT		
Marine Pollutant (DOT):	No	
UN "Model Regulation":	-	
All components of this product are listed on the Canadian Don SARA Section 313 (specific toxic chemical listings) Substa California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is r Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not I Prop 65 - Developmental toxicity, male Substance is not list Information about limitation of use: For use only by technic Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the The conditions of restrictions according to Article 67 and market and use must be observed.	, ental Protection Agency Toxic Substances Control Act Chemical substance Inve nestic Substances List (DSL). ance is not listed. not listed. isted. ed.	
Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisa	tion for use) Substance is not listed.	(Contd. on page 4)

Product name: Polypropylene glycol 400

(Contd. of page 3)

USA

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/04/2016 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation ENIECS: European International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation ENIECS: European International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation ENIECS: European International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation ENIECS: European Internation Carriage of Dangerous Goods by Road) DOT: US Department of Transportation ENIECS: European Internation Carriage of Dangerous Goods by Road) DOT: US Department of Transportation CAS: Chemical Abstracts Service (division of the American Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent VPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)