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1 Identification
Product identifier
Product name: <u>Triethyleneglycol divinyl ether</u> Stock number: H37786
CAS Number: 765-12-8 EC number:
616-344-5 Details of the supplier of the safety data sheet
Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660
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.
Label 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 I Health (acute effects) = 1
FIRE Flammability = 1 REACTIVITY Physical Hazard = 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: 765-12-8 Triethyleneglycol divinyl ether
Concentration: <100%
Identification number(s): EC number: 616-344-5
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 swallowing Seek medical treatment. After swallowing Seek medical treatment.
Aner swanowing 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 dioxide Advice for firefighters Protective continuents
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). Provention of concentrate No. angoid monouror reviewed
Prevention of secondary hazards: No special measūres required. (Contd. on page 2)

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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. Protective Action Criteria for Chemicals PAC-1: Substance is not listed. PAC-2: Substance is not listed. PAC-3: Substance is not listed.

7 Handling and storage

Handling Precautions 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. 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). Protection of hands:

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. **Eye protection:** Safety glasses with side shields / NIOSH (US) or EN 166(EU) **Body protection:** Protective work clothing.

9 Physical and chemical properties

s Filysical and chemical properties	
Information on basic physical and che General Information Appearance: Form: 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:	-7 °C (19 °F) 242-245 °C (468-473 °F) Not determined
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	119 °C (246 °F) Not determined Not determined Not determined Not determined
Explosion limits: Lower: Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic:	Not determined. Not determined Not determined 0.99 g/cm ³ (8.262 lbs/gal) Not determined. Not determined.
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10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide	occur if used and stored according to specifications.	
 11 Toxicological information Information on toxicological effects Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Eye irritation: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subscute to chronic toxicity: No effects known. Aspiration hazard: No effects known. Aspiration hazard: No effects known. Additional toxicological information: To the best of our knowledge the acuted	erial is available from the EPA, IARC, NTP, OSHA or ACGIH.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow undiluted product or large quantities to reach ground water, water Avoid transfer into the environment. Results of PBT and VPVB assessment PBT: Not applicable. VPVB: Not applicable. Other adverse effects No further relevant information available. 13 Disposal considerations	course or sewage system.	
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.	[.] disposal.	
14 Transport information UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA		
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA	Not applicable	
Class Packing group	Not applicable	
Packing group DOT, ADR, IMDG, IATA	Not applicable	
Environmental hazards: Special precautions for user	Not applicable. Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Coc Transport/Additional information:		
DOT Marine Pollutant (DOT):	No	
UN "Model Regulation":	Not applicable	
15 Regulatory information Safety, health and environmental regulations/legislation specific for the s GHS label elements Not applicable Hazard pictograms Not applicable Hazard statements Not applicable Mational regulations All components of this product are listed in the U.S. Environmental Protection / All components of this product are listed on the Canadian Non-Domestic Subsi SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed.	Agency Toxic Substances Control Act Chemical substance Inventory. tances List (NDSL).	
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USA

Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use much because the second secon market and use must be observed.

Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user."
Department issuing SDS: Global Marketing Department
Date of preparation/Revision: Print date, revision date and version number are in the header of each page.
Abbreviations and accomyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
MDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Substances
LCSO: Lethal concentration, 50 percent
DED: Lethal concentration, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SYHC: Substances of Very High Concern
PVVE: very Persistent and very Bioaccumulative Hygienists (USA)
CHA: Occupational Safety and Health Administration (USA)
NTP: National ToxicoOgy Porgram (USA)
NTP: National ToxicoOgy Porgram (USA)