Safety Data Sheet per OSHA HazCom 2012



Product identifier Product name: Agar Stock number: 36402 CAS Number: 9002-18-0 EC number: 232-658-1 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 according to the Globally Harmonized System (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) = 0 I Flammability = 1 ■ Physical Hazard = 0 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 9002-18-0 Agar Identification number(s): EC number: 232-658-1

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 Product is not flammable. Use fire-fighting measures that suit the surrounding fire. 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 material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required.

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Reference to other sections See Section 7 for information on safe har See Section 8 for information on persona See Section 13 for disposal information.	ndling I protection equipment.	(Contd. of page 1)
7 Handling and storage		
Handling Precautions for safe handling Keep container tightly sealed. Store in cool, dry place in tightly closed c	ontainers. x xplosions and fires: The product is not flammable	
Conditions for safe storage, including		
Storage Requirements to be met by storeroom Information about storage in one com Further information about storage con Keep container tightly sealed. Store in cool, dry conditions in well seale Specific end use(s) No further relevant	d containers.	
8 Exposure controls/personal prote	ction	
Additional information about design o Properly operating chemical fume hood of		
	uire monitoring at the workplace: Not required.	
Protection of hands: Impervious gloves	Indling chemicals should be followed. nd feed. hing immediately. d of work. orking environment. birator when high concentrations are present.	
Check protective gloves prior to each use The selection of suitable gloves not only Eye protection: Safety glasses Body protection: Protective work clothir	depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.	
9 Physical and chemical properties		
Information on basic physical and che General Information Appearance:	mical properties	
Form: Color:	Powder White	
Odor:	Odorless	
Odor threshold: pH-value:	Not determined. Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined	
Flash point:	Not determined Product is not flammable. Not determined Not determined Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Relative density	Not determined Not determined Not applicable. Not determined Not determined.	
Vapor density Evaporation rate Solubility in / Miscibility with Water:	Not applicable. Not applicable. Partly soluble	
Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic:	Not determined. Not applicable. Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions No	be avoided : Decomposition will not occur if used and stored according to specifications.	

Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide

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11 Toxicological information		
Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant 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 classification data on carcinogenic properties of this ma Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acut	wn.	
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 material to be released to the environment without proper govern 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.	nmental permits. rr course or sewage system.	
13 Disposal considerations		
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.	er disposal.	
14 Transport information Not a hazardous material for transportation.		
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA Class	None	
Packing group		
DOT, IMDG, IATA	None	
Environmental hazards:	Not applicable.	
Special precautions for user Transport in bulk according to Appen II of MARPOL 73/78 and the IBC Co	Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Co Transport/Additional information:	de Not applicable. Not dangerous according to the above specifications.	
DOT	acgo. add according to the above appenhoatoris.	
Marine Pollutant (DOT):	No	
 15 Regulatory information Safety, health and environmental regulations/legislation specific for the GHS label elements Not applicable Hazard pictograms Not applicable Hazard statements Not applicable National regulations All components of this product are listed in the U.S. Environmental Protection SARA Section 313 (specific toxic chemical listings) Substance is not listed. 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. Information about limitation of use: For use only by technically qualified into Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regul The conditions of restrictions according to Article 67 and Annex XVII of market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) S 	Agency Toxic Substances Control Act Chemical substance Inventory d. lividuals. ations (EC) No. 1907/2006. Substance is not listed. the Regulation (EC) No 1907/2006 (REACH) for the manufacturing	g, placing on the
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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 con Department issuing SDS: Global Marketing Department Date of preparation / last revision 1/24/2015 / -Abbreviations and acronyms: IMD6: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: 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 Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 60 percent VPWs very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)

USA