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1 Identification Product identifier	
Product identifier Product name: <u>Agarose LM</u>	
Stock number: H26417 CAS Number: 9012-36-6 EC number: 232-731-8	
Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar	
Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 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.	
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       I         HEALTH       I         IREALTH       I	
Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	
3 Composition/information on ingredients	
Chemical characterization: Substances CAS# Description: 9012-36-6 Agarose Concentration: ≤100% Identification number(s): EC number: 232-731-8	
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CASH Description:         9012-36-6 Agarose         Concentration: S100%         Identification number(s):         EC number: 232-731-8 <b>4 First-aid measures</b> 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     Immediate medical advice.     After skin contact     Immediate medical advice.     After swallowing Seek medical treatment.     Information for adcord     Immediate medical advice.     After swallowing Seek medical treatment.     Information for adcord     Most important symptoms and effects, both acute and delayed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical attention and special freatment needed No further relevant information available.     Indication of any immediate medical	
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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 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.			
<b>PAC-2:</b> Substance is not listed. <b>PAC-3:</b> Substance is not listed.			
7 Heredliner and stars as			
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 storeroom	ns and receptacles: No special requirements.		
Information about storage in one com Further information about storage co	nmon storage facility: Store away from oxidizing agents. nditions:		
Keep container tightly sealed. Store in cool, dry conditions in well seale	ad containers		
Specific end use(s) No further relevant	information available.		
8 Exposuro controls/porsonal proto	oction		
8 Exposure controls/personal prote Additional information about design of			
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 req	nuire monitoring at the workplace.		
The product does not contain any releva	Int 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 meas			
General protective and hygienic measures for his	sures andling chemicals should be followed		
The usual precautionary measures for ha Keep away from foodstuffs, beverages a	ind fied.		
Remove all soiled and contaminated clou Wash hands before breaks and at the er	nd of work.		
Maintain an ergonomically appropriate w Breathing equipment:	vorking environment.		
Use suitable respirator when high conce	ntrations are present.		
Use suitable respirator when high conce Use suitable respiratory protective devic Recommended filter device for short	term use:		
Use a respirator with type N95 (USA) or purifying respirators are appropriate. Or	PE (EN 143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air- nly use equipment tested and approved under appropriate government standards.		
Protection of hands:			
Impervious gloves Check protective gloves prior to each us	e for their proper condition.		
The selection of suitable gloves not only Material of gloves Nitrile rubber, NBR	depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.		
Penetration time of glove material (in	minutes) 480		
Glove thickness: 0.11 mm	e shields / NIOSH (US) or EN 166/EU)		
Eye protection: Safety glasses with side shields / NIOSH (US) or EN 166(EU) Body protection: Protective work clothing.			
9 Physical and chemical properties			
Information on basic physical and che			
General Information			
Appearance: Form:	Powder		
Odor: Odor threshold:	Not determined Not determined.		
pH-value:	Not applicable.		
Change in condition			
Melting point/Melting range: Boiling point/Boiling range:	Not determined Not determined		
Sublimation temperature / start: Flammability (solid, gaseous)	Not determined Not determined.		
Ignition temperature:	Not determined		
Decomposition temperature: Auto igniting:	Not determined Not determined.		
Danger of explosion:	Not determined.		
Explosion limits: Lower:	Not determined		
Upper:	Not determined		
Vapor pressure: Density:	Not applicable. Not determined		
Relative density Vapor density	Not determined. Not applicable.		
Evaporation rate	Not applicable.		
Solubility in / Miscibility with _ Water at 80 °C (176 °F):	10 g/l		
Partition coefficient (n-octanol/water): Viscosity:	: Not determined.		
dynamic:	Not applicable.		
kinematic:	Not applicable. (Contd. on page :		
	(Contd. on page 3 USA		

Product name: Agarose LM

roduct name: Agarose LM	(Control of page 2)
Other information No further relevant inform	(Contd. of page 2) nation available.
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposit Possibility of hazardous reactions Reacts with strong oxidizing a Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carb	ition will not occur if used and stored according to specifications. agents
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 Reproductive toxicity: No effects known.	s of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Specific target organ system toxicity - repeated exposure: No e Specific target organ system toxicity - single exposure: No effe Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.	
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 pro Do not allow undiluted product or large quantities to reach ground v 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.	oper governmental permits.
13 Disposal considerations Waste treatment methods Recommendation Consult state, local or national regulations to en Uncleaned packagings: Recommendation: Disposal must be made according to official reg	
14 Transport information	
UN-Number DOT, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	
DOT, ADR, ADN, IMDG, IATA Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, ADR, IMDG, IATA	Not applicable
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and t	the IBC Code Not applicable.
Transport/Additional information:	
DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	Not applicable
15 Regulatory information Safety, health and environmental regulations/legislation specif GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable National regulations All components of this product are listed in the U.S. Environmental All components of this product are listed on the Canadian Domestic SARA Section 313 (specific toxic chemical listings) Substance	l Protection Agency Toxic Substances Control Act Chemical substance Inventory.

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.

## Product name: Agarose LM

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USA

Prop 65 - Developmental toxicity 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 individuals. 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 must be observed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) if 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 acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Air Transport Association
IATA: International Air 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 dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Cherence of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IATA: Concentance of Severnmental Industrial Hygienists (USA)
IATA: Concupational Safety and Health Administration (USA)
IATA: Concupational Safety and Health Administration (USA)
IATA: Concupational Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)