

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier

Product name: DL-Alanine methyl ester hydrochloride Stock number: A12599, L08350 CAS Number: 13515-97-4 EC number: 236-854-8 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: Manufacturer/Supplier. 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 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) = 1Flammability = 1 Flammability = 1 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: 13515-97-4 DL-Alanine methyl ester hydrochloride Identification number(s): EC number: 236-854-8 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 CO2, sand, extinguishing powder. Do not use water. 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 Nitrogen oxides (NOx) Hydrogen chloride (HCI) 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.

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		ewed on 02/16/2007
Product name: DL-Alanine methyl es	ster hydrochloride	
Methods and material for containmen Prevention of secondary hazards: No Reference to other sections See Section 7 for information on safe ha See Section 8 for information on person See Section 13 for disposal information.	andling nal 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 of	containers.	
Information about protection against Conditions for safe storage, including Storage Requirements to be met by storeroon Information about storage in one com	explosions and fires: No information known. g any incompatibilities ns and receptacles: No special requirements. nmon storage facility: Store away from oxidizing agents.	
Further information about storage con Keep container tightly sealed. Store in cool, dry conditions in well seale Specific end use(s) No further relevant	Inditions: The second s	
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Additional information: No data	quire monitoring at the workplace: Not required.	
Protection of hands: Impervious aloves	nandling chemicals should be followed. and feed. othing immediately. nd of work.	
Eye protection: Safety glasses Body protection: Protective work clothi	ing.	
9 Physical and chemical properties Information on basic physical and che		
General Information Appearance: Form: Odor:	Solid Not determined	
Odor threshold: pH-value:	Not determined. Not applicable.	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	157-158 °C (315-316 °F) Not determined Not determined	
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not applicable Product is not flammable. Not determined Not determined. Not determined.	
Danger of explosion: Explosion limits: Lower:	Product does not present an explosion hazard. Not determined	
Upper: Vapor pressure: Density: Relative density Vapor density	Not determined Not applicable. Not determined Not determined. Not deplicable.	
Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water).	Not applicable. Not determined	
Viscosity: dynamic: kinematic: Other information	Not applicable. Not applicable. 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. Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents

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Product name: DL-Alanine methyl ester hydrochloride			
		(Contd. of page 2)	
Hazardous decomposition products: Carbon monoxide and carbon dioxide		(Comu. o, page 2)	
Nitrogen oxides			
Hydrogen chloride (HCl)			
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 mate	erial is available from the EPA, IARC, NTP, OSHA or ACGIH.		
Reproductive foxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects know			
Specific target organ system toxicity - single exposure: No effects know. Aspiration hazard: No effects known.	11.		
Subacute to chronic toxicity: No effects known.	· · · · · · · · · · · · · · · · · · ·		
Additional toxicological information: To the best of our knowledge the acute	and chronic toxicity of this substance is not tully 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 proper governn Do not allow undiluted product or large quantities to reach ground water, water	nental permits. course or sewage system.		
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			
Waste treatment methods			
Recommendation Consult state, local or national regulations to ensure proper	disposal.		
Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.			
14 Transport information			
Not a hazardous material for transportation.			
DOT, ÎMDĜ, IATA	None		
UN proper shipping name DOT, IMDG, IATA	None		
Transport hazard class(es)			
DOT, ADR, IMDG, IATA Class	None		
Packing group	None		
DOT, IMDG, IATA	None		
Environmental hazards:	Not applicable.		
Special precautions for user Transport in bulk according to Annex II of MARPOL73/78 and the IBC Cod	Not applicable.		
Transport/Additional information:	Not dangerous according to the above specifications.		
DOT			
Marine Pollutant (DOT):	No		
15 Regulatory information			
Safety, health and environmental regulations/legislation specific for the su	ubstance or mixture		
GHS label elements Not applicable Hazard pictograms Not applicable			
Signal word Not applicable			
Hazard statements' Not applicable National regulations		· · · · · · · · · · · · · · · · · · ·	
This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This			
product must not be used for commercial purposes or in formulations for commercial purposes. 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 Substance is not listed.			
Prop 65 - Developmental toxicity, female 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. Substance is not listed.

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Product name: DL-Alanine methyl ester hydrochloride

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.	(Contd. of page 3)
16 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suit information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.	ability of this product not in
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transportation 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 concent	

Lool, Lethal dose, 50 percent UD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGH: 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)

USA