

1 Identification Product identifier Product name: <u>3-(Trifluoromethyl)-D-phenylalanine</u> Stock number: H27508 CAS Number: 14464-67-6 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. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-322-4757 Email: tech @alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: Call Carechem 24 at +44 (0) 1865 407333 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	
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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.	
Label elements GHS label elements Not applicable Hazard nictograms 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 I 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: 14464-67-6 3-(Trifluoromethyl)-D-phenylalanine	
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 ave contact Pisse opened ave for several minutes under running water. Then consult a doctor	
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 dioxide Hydrogen fluoride (HF) Nitrogen oxides (NOx)	
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.	

Methods and material for containment and cleaning up: Pick up mechanically. Prevention of secondary hazards: No special measures required.

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Product name: 3-(Trifluoromethyl)-D-	-phenylalanine	
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 al protection equipment.	(Contd. of page 1)
Conditions for safe storage, including Storage Requirements to be met by storeroom	explosions and tires: No information known. I any incompatibilities Ins and receptacles: No special requirements. Imon storage facility: Store away from oxidizing agents. Inditions:	
Control parameters		
Protection of hands: Impervious gloves Check protective gloves prior to each use	andling chemicals should be followed. Ind feed. A of work. Forking environment. pirator when high concentrations are present. e for their proper condition. depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. minutes) Not determined	
9 Physical and chemical properties		
Information on basic physical and che General Information Appearance: Form: Color:	emical properties Powder White	
	Not determined Not determined.	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Not applicable. Not determined Not determined Not determined	
Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:	Not applicable Not determined. Not determined Not determined Not determined.	
Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic:	Product does not present an explosion hazard. Not determined Not determined Not determined. Not determined. Not determined. Not applicable. Not determined. Not determined. Not determined. Not applicable. Not applicable.	
10 Stability and reactivity		

ility 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

(Contd. on page 3)

Product name: 3-(Trifluoromethyl)-D-phenylalanine			
<i>Hazardous decomposition products:</i> Carbon monoxide and carbon dioxide Hydrogen fluoride Nitrogen oxides		(Contd. of page 2)	
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 Reproductive toxicity: 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. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute			
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 governmental permits. Do not allow undiluted product or large quantities to reach ground water, water 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.			
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	Not applicable.		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	1.		
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 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 Su to research and development only. This product must be used by or directly und product must not be used for commercial purposes or in formulations for comme SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65	ibstances Control Act Chemical Substance Inventory. Use of this pro der the supervision of a technically qualified individual as defined by ercial purposes.	oduct is restricted TSCA. This	

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, semale Substance is not listed. Prop 65 - Developmental toxicity, male 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. (Contd. on page 4)

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(Contd. of page 3)

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 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 11/24/2015 / -Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods DOT: US Department of Transportation 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 LD50: Lethal dose, 50 percent US50: Lethal dose, 50 percent CACGHI: 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