

Safety Data Sheet per OSHA HazCom 2012

1 Identification Product identifier Product name: 3-(3-Hydroxyphenyl)-DL-alanine Stock number: H63163 CAS Number: 775-06-4 EC number: 212-270-9 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) ! GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation. Hazards not otherwise classified No information known. Label elements GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms GHS07 Signal word Warning Hazard statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. P405 WHMIS classification D2B - Toxic material causing other toxic effects Ţ Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) Health (acute effects) = 1Flammàbility = 1 TIVITY 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: 775-06-4 3-(3-Hydroxyphenyl)-DL-alanine Identification number(s): EC number: 212-270-9 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.

## Product name: 3-(3-Hydroxyphenyl)-DL-alanine (Contd. of page 1) 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 freatment 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 Nitrogen oxides (NOX) Advice for fireficience 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 product to reach sewage system or any water course. Methods and material for containment and cleaning up: Ensure adequate ventilation. Prevention of secondary hazards: No special measures required. 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. 7 Handling and storage Handling Precautions for safe handling Recautions for sale nanoling Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. 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 The usual 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. Avoid contact with the eyes and skin. Maintai an ergonomically appropriate working environment 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 type N95 (USA) or PE (EN 143) cartridges 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. Protection of hands: Impervious gloves The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. **Penetration time of glove material (in minutes)** Not determined **Eye protection:** Safety glasses **Body protection:** Protective work clothing. 9 Physical and chemical properties Information on basic physical and chemical properties General Information Appearance: Form: Powder Color: Off-white to yellow Not determined Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: 280-285 °C (536-545 °F) (dec) (Contd. on page 3)

## Product name: 2-(2-Hydroxynhonyl)-DI -alaning

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Product name: 3-(3-Hydroxyphenyl)-	·DL-alanine	
		(Contd. of page 2
Boiling point/Boiling range:	Not determined	Conta. or page 2
Sublimation temperature / start:	Not determined	
Flammability (solid, gaseous)	Not determined.	
	Not determined Not determined	
	Not determined.	
	Not determined.	
Explosion limits:	Nat data washood	
	Not determined Not determined	
Vapor pressure:	Not applicable.	
	Not determined Not determined.	
Vapor density	Not applicable.	
Evaporation rate Solubility in / Miscibility with	Not applicable.	
Water:	Not determined	
Partition coefficient (n-octanol/water):	Not determined.	
Viscosity: dynamic:	Not applicable.	
kinematic:	Not applicable.	
Other information	No further relevant information available.	
0 Stability and reactivity		
Reactivity No information known.	to to ensure an attention of the second s	
Thermal decomposition / conditions t	nended storage conditions. <b>o be avoided:</b> Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions Rea	acts with strong oxidizing agents	
Conditions to avoid No further relevant Incompatible materials: Oxidizing agent		
Hazardous decomposition products:	1.5	
Carbon monoxide and carbon dioxide		
Nitrogen oxides		
1 Toxicological information		
Information on toxicological effects		
Acute toxicity: The Registry of Toxic Eff	fects of Chemical Substances (RTECS) contains acute toxicity data for this substance.	
LD/LC50 values that are relevant for cl	lassification: No data	
Skin irritation or corrosion: Causes ski Eye irritation or corrosion: Causes seri	in irritation.	
Sensitization: No sensitizing effects kno	own.	
Germ cell mutagenicity: No effects know	own. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
<b>Reproductive toxicity:</b> The Registry of T	Toxic Effects of Chemical Substances (RTECS) contains reproductive data for this substance.	
Specific target organ system toxicity -	- repeated exposure: No effects known.	
Aspiration hazard: No effects known.	- single exposure: May cause respiratory irritation.	
Subacute to chronic toxicity: No effects	ts known.	
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
2 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant inf	ormation available.	
Aquatic toxicity: No further relevant info Persistence and degradability No further	er relevant information available.	
Bioaccumulative potential No further re Mobility in soil No further relevant inform	elevant information available.	
Additional ecological information:		
General notes:	uantities 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 releval	nt information available.	
• Discussion - id dama		
3 Disposal considerations		
Waste treatment methods Recommendation Consult state local of	or national regulations to ensure proper disposal.	
Uncleaned packagings:		
<b>Recommendation:</b> Disposal must be ma	ade according to official regulations.	
4 Transport information		
4 Transport information		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
Packing group		
Packing group DOT, IMDG, IATA	Not applicable	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
		(Contd. on page



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