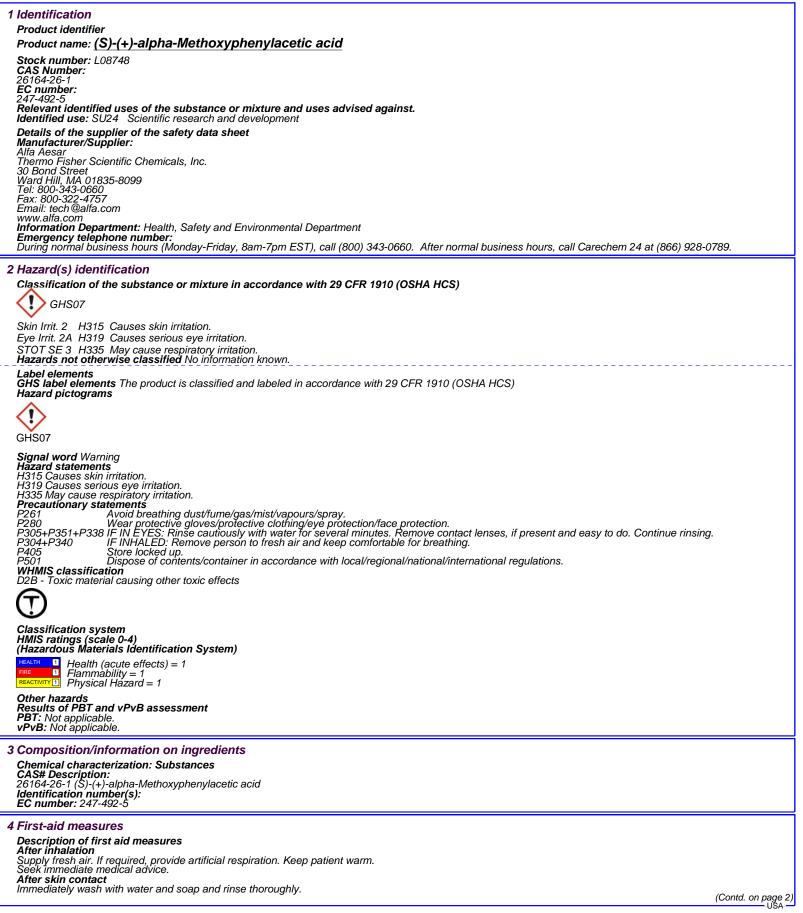


Safety Data Sheet per OSHA HazCom 2012



Product name: (S)-(+)-alpha-Methoxyphenylacetic acid (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 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: 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 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: Not required. Additional information: No data Exposure controls Personal 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. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present. Protection of hands: Impervious gloves Check protective gloves prior to each use for their proper condition. 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: Solid Color: White Odor: Odor threshold: Not determined Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 62-65 °C (144-149 °F) 164-166 °C (327-331 °F) (18 mmHg) Not determined Not applicable Flash point: Flammability (solid, gaseous) Not de'termined. Ignition temperature: Not determined

Product name: (S)-(+)-alpha-Methoxyphenylacetic acid

Decomposition temperature:		
	Not determined	(Contd. of page 2)
Auto igniting:	Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower:	Not determined	
	Not determined Not applicable	
Density:	Not applicable. Not determined	
	Not determined. Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water: Partition coefficient (n-octanol/water):	Not determined Not determined.	
Viscosity:		
dynamic: kinematic:	Not applicable. Not applicable.	
Other information	No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known		
Chemical stability Stable under recomm	nended storage conditions. o be avoided: Decomposition will not occur if used and stored according to specifications.	
Thermal decomposition / conditions to Possibility of hazardous reactions No	o be avoided: Decomposition will not occur if used and stored according to specifications.	
Conditions to avoid No further relevant	information available.	
Incompatible materials: Oxidizing agen	its	
Hazardous decomposition products: (
11 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known. LD/LC50 values that are relevant for cl	location, No data	
Skin irritation or corrosion: Causes ski		
Eye irritation or corrosion: Causes ser	ious eye irritation.	
Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno	WП. лмп	
Carcinogenicity: No classification data	wn. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.	
Reproductive toxicity: No effects known	n.	
Specific target organ system toxicity - Specific target organ system toxicity -	• single exposure: May cause respiratory irritation.	
Aspiration hazard: No effects known.		
Subacute to chronic toxicity: No effect Additional toxicological information: 7	is known. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.	
12 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant info Persistence and degradability No furth	ormation available. Per relevant information available	
Bioaccumulative potential No further re	elevant information available.	
Mobility in soil No further relevant inforr Additional ecological information:	mation available.	
General notes:		
Do not allow material to be released to th	ne environment without proper governmental permits.	
Avoid transfer into the environment.	uantities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessment		
PBT: Not applicable.		
vPvB . Not applicable		
vPvB: Not applicable. Other adverse effects No further releva	nt information available.	
vPvB: Not applicable. Other adverse effects No further releva	nt information available.	
vPvB: Not applicable. Other adverse effects No further releva. 13 Disposal considerations	nt information available.	
vPvB: Not applicable. Other adverse effects No further releva 13 Disposal considerations Waste treatment methods		
vPvB: Not applicable. Other adverse effects No further relevant 13 Disposal considerations Waste treatment methods Recommendation Consult state, local of Uncleaned packagings:	r national regulations to ensure proper disposal.	
vPvB: Not applicable. Other adverse effects No further releva 13 Disposal considerations Waste treatment methods Recommendation Consult state, local o	r national regulations to ensure proper disposal.	
vPvB: Not applicable. Other adverse effects No further releval 13 Disposal considerations Waste treatment methods Recommendation Consult state, local o Uncleaned packagings: Recommendation: Disposal must be ma 14 Transport information	r national regulations to ensure proper disposal. ade according to official regulations.	
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vPvB: Not applicable. Other adverse effects No further releva. 13 Disposal considerations Waste treatment methods Recommendation Consult state, local or Uncleaned packagings: Recommendation: Disposal must be ma 14 Transport information Not a hazardous material for transportatio UN-Number DOT, IMDG, IATA UN proper shipping name DOT, IMDG, IATA Transport hazard class(es) DOT, ADR, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user Transport in bulk according to Annex	r national regulations to ensure proper disposal. ade according to official regulations. on. None None None None Not applicable. Not applicable. Il of MARPOL73/78 and the IBC Code Not applicable.	
vPvB: Not applicable. Other adverse effects No further releva. 13 Disposal considerations Waste treatment methods Recommendation Consult state, local o. Uncleaned packagings: Recommendation: Disposal must be ma 14 Transport information Not a hazardous material for transportatio UN-Number DOT, IMDG, IATA UN proper shipping name DOT, IMDG, IATA Transport hazard class(es) DOT, ADR, IMDG, IATA Class Packing group DOT, IMDG, IATA Environmental hazards: Special precautions for user	r national regulations to ensure proper disposal. ade according to official regulations. on. None None None None Not applicable. Not applicable.	(Contd. on page 4

	(Contd. of page
DOT Marine Pollutant (DOT):	Νο
Regulatory information Safety, health and environmental regulation GHS label elements The product is classifie Hazard pictograms	ons/legislation specific for the substance or mixture ad and labeled in accordance with 29 CFR 1910 (OSHA HCS)
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/fumm P280 Wear protective gloves/pi P305+P351+P338 IF IN EYES: Rinse cautio	e/gas/mist/vapours/spray. rotective clothing/eye protection/face protection. usly with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. rson to fresh air and keep comfortable for breathing.
P405 Store locked up. P501 Dispose of contents/conta	ainer in accordance with local/regional/national/international regulations.
to research and development only. This prod product must not be used for commercial put SARA Section 313 (specific toxic chemical California Proposition 65 Prop 65 - Chemicals known to cause cano Prop 65 - Developmental toxicity Substance	cer Substance is not listed.
The conditions of restrictions according t market and use must be observed.	ibstance is not listed.
Substance is not listed. Annex XIV of the REACH Regulations (req Chemical safety assessment: A Chemical	uuiring Authorisation for use) Substance is not listed. Safety Assessment has not been carried out.
information to ensure proper use and protect	as a supplement to other information gathered by them, and should make independent judgement of suitability of this the health and safety of employees. This information is furnished without warranty, and any use of the product not i Sheet, or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Date of preparation / last revision 11/24/20 Abbreviations and acronyms: RID: Règlement international concernant le transport des m IATA-DGR: Dangerous Goods Regulations by the "Internati	I Department D15 / - narchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ional Air Transport Association" (IATA) viation Organization" (ICAO)
ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil A IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chen CAS: Chemical Abstracts Service (division of the American HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information Syste LD50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent UD50: Lethal dose, 50 percent ACGIH: American Conference of Governmental Industrial H OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	viation Organization" (ICAO) nical Substances Chemical Society) am (Canada)
LD50: Lethal dose, 50 percent yPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial H OSHA: Occupational Safety and Health Administration (US NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	lygienists (USA) A)