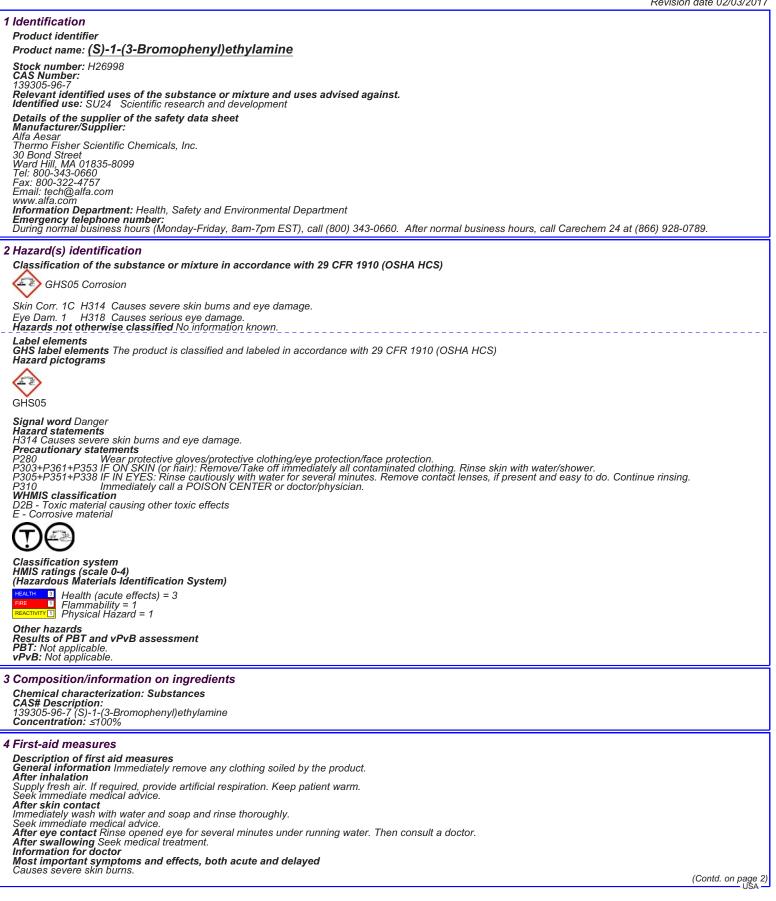


Safety Data Sheet acc. to OSHA HCS

Page 1/5 Printing date 02/06/2017 Revision date 02/03/2017



(Contd. of page 1)

Product name: (S)-1-(3-Bromophenyl)ethylamine

Causes serious eye damag

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 Nitrogen oxides (NOX) Hydrogen bromide (HBr) Advice for fireficientors 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: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent. Dispose of contaminated material as waste according to section 13. Provide a dequate 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

Handle under dry protective gas. 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 air. Store away from air. Do not store together with acids. Store away from oxidizing agents. **Further information about storage conditions:** Store under dry inert gas. This product is air sensitive. 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 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 eves and etime.

Avoid contact with the eyes and skin. 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 multi-purpose combination (US) or type ABEK (EN 14387) 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 such as NIOSH (USA) or CEV. (EU). **Determine if air-purifying respirators are appropriate.** Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEV. (EU).

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.

Eye protection: Tightly sealed goggles Full face protection_

Body protection: Protective work clothing

(Contd. on page 3)

USA

		(Contd. of page 2)
9 Physical and chemical properties	S	
Information on basic physical and ch General Information	iemical properties	
Appearance: Form: Odor:	Liquid Amine-like	
Odor threshold: pH-value (1.5 g/l) at 20 °C (68 °F):	Not determined. 10.5	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined 96 °C (205 °F) (4mm) Not determined	
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	> 110 °C (> 230 °F) Not determined. Not determined Not determined Not determined.	
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water at 20 °C (68 °F): Partition coefficient (n-octanol/water) Viscosity: dynamic:	Not determined.	
kinematic: Other information	Not determined. No further relevant information available.	
Chemical stability Stable under recom Thermal decomposition / conditions Possibility of hazardous reactions Re Conditions to avoid No further relevan Incompatible materials: Acids Air Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen bromide	to be avoided : Decomposition will not occur if used and stored according to specifications. eacts with strong oxidizing agents nt information available.	
LD/LC50 values that are relevant for Skin irritation or corrosion: Causes s Eye irritation or corrosion: Causes s Sensitization: No sensitizing effects kn Germ cell mutagenicity: No effects know Carcinogenicity: No classification data Reproductive toxicity: No effects know Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect Additional toxicological information: Carcinogenic categories	revere skin burns. Prious eye damage. Nown. a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Wn. - repeated exposure: No effects known. - single exposure: No effects known.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant in Persistence and degradability No furt Bioaccumulative potential No further Mobility in soil No further relevant info Additional ecological information: General notes: Avoid transfer into the Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	ther relevant information available. relevant information available. rmation available. environment. 1	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local	or national regulations to ensure proper disposal.	

Recommendation Consult state, local or national regulations to ensure proper disposal. **Uncleaned packagings: Recommendation:** Disposal must be made according to official regulations.

USA (Contd. on page 4)

Safety Data Sheet

Product name: (S)-1-(3-Bromophenyl)ethylamine

(Contd. of page 3)

4 Transport information UN-Number DOT, IMDG, IATA	
DUI, IMDG, IATA	1010705
UN proper chipping new-	UN2735
UN proper shipping name DOT ADR	Amines, liquid, corrosive, n.o.s. ((S)-1-(3-Bromophenyl)ethylamine) 2735 Amines, liquid, corrosive, n.o.s. ((S)-1-(3-Bromophenyl)ethylamine)
IMDG, IATA	AMINES, LIQUID, CORROSIVE, N.O.S. ((S)-1-(3-Bromophényl)ethylamine)
Transport hazard class(es) DOT	
Class	8 Corrosive substances.
Label ADR	8
Class Label	8 (C7) Corrosive substances 8
Class Label	8 Corrosive substances. 8
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user EMS Number:	Warning: Corrosive substances F-A,S-B
Segregation groups	Г-А, S-В Alkalis
Transport in bulk according to Annex II of MARPOL73/78 and the IBC	Code Not applicable.
Transport/Additional information:	
DOT Marina Ballutant (DOT):	No
Marine Pollutant (DOT):	No
UN "Model Regulation":	UN2735, Amines, liquid, corrosive, n.o.s. ((S)-1-(3-Bromophenyl)ethylamine), 8, III
to research and development only. This product must be used by or directly product must not be used for commercial purposes or in formulations for cc This product is not listed on the Canadian Domestic Substances List (DSL) SARA Section 313 (specific toxic chemical listings) Substance is not lis 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, male Substance is not listed. Information about limitation of use: For use only by technically qualified Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Reg	contaminated clothing. Rinse skin with water/shower. hutes. Remove contact lenses, if present and easy to do. Continue rinsing. an. ic Substances Control Act Chemical Substance Inventory. Use of this product is restricted y under the supervision of a technically qualified individual as defined by TSCA. This ommercial purposes.) or the Canadian Non-Domestic Substances List (NDSL). sted. ¹ individuals. gulations (EC) No. 1907/2006. Substance is not listed.
Signal word Danger Hazard statements H314 Causes severe skin burns and eye damage. Precautionary statements P280 Wear protective gloves/protective clothing/eye protectio P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all 0 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several min P310 Immediately call a POISON CENTER or doctor/physicia National regulations This product is not listed in the U.S. Environmental Protection Agency Toxi to research and development only. This product must be used by or directly product must not be used for commercial purposes or in formulations for cc This product is not listed on the Canadian Domestic Substances List (DSL) SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Chemicals known to cause cancer 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 Other regulations, limitations according to Article 67 and Annex XVII of market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use Chemical safety assessment: A Chemical Safety Assessment has not be	contaminated clothing. Rinse skin with water/shower. hutes. Remove contact lenses, if present and easy to do. Continue rinsing. an. ic Substances Control Act Chemical Substance Inventory. Use of this product is restricted y under the supervision of a technically qualified individual as defined by TSCA. This ommercial purposes.) or the Canadian Non-Domestic Substances List (NDSL). sted. ¹ individuals. gulations (EC) No. 1907/2006. Substance is not listed. of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the each carried out.
Signal word Danger Hazard statements H314 Causes severe skin burns and eye damage. Precautionary statements P280 Wear protective gloves/protective clothing/eye protectio P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all of P305+P351+P338 IF IN EYES: Rinse cautiously with water for several min P310 Immediately call a POISON CENTER or doctor/physicial National regulations This product is not listed in the U.S. Environmental Protection Agency Toxi to research and development only. This product must be used by or directly product must not be used for commercial purposes or in formulations for cc This product is not listed on the Canadian Domestic Substances List (DSL) SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female 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 Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Reg The conditions of restrictions according to Article 67 and Annex XVII market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use Chemical safety assessment: A Chemical Safety Assessment has not be '6 Other information	contaminated clothing. Rinse skin with water/shower. hutes. Remove contact lenses, if present and easy to do. Continue rinsing. an. ic Substances Control Act Chemical Substance Inventory. Use of this product is restricted y under the supervision of a technically qualified individual as defined by TSCA. This ommercial purposes.) or the Canadian Non-Domestic Substances List (NDSL). sted. ¹ individuals. gulations (EC) No. 1907/2006. Substance is not listed. of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the een carried out. ¹ mation gathered by them, and should make independent judgement of suitability of this oyees. This information is furnished without warranty, and any use of the product not in product or process, is the responsibility of the user.



Product name: (S)-1-(3-Bromophenyl)ethylamine

- IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association 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 US0: Lethal dose, 50 percent VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) MTP: National Toxicology Program (USA) IATC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) Skin Corr. 10: Skin corrosion/irritation, Hazard Category 1C Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

(Contd. of page 4)

USA