

Safety Data Sheet per OSHA HazCom 2012

1 Identification

Product identifier Product name: 2-(4-Bromophenyl)ethylamine Stock number: H63706 **CAS Number:** 73918-56-6 EC number: 7-636-2 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) EZ GHS05 Corrosion Skin Corr. 1B H314 Causes severe skin burns and eye damage. Eye Dam. 1 H318 Causes serious eye damage. 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 E.F. GHS05 Signal word Danger Hazard statements H314 Causes severe skin burns and eye damage. Precautionary statements P260 Do not b Precautionary statements P260 Do not breathe dust/fume/gas/mist/vapours/spray. P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P405 Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification D2B - Toxic material causing other toxic effects E - Corrosive material of the Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) 3 Health (acute effects) = 31 Flammability = 1Physical 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: 73918-56-6 2-(4-Bromophenyl)ethylamine Identification number(s): EC number: 277-636-2 4 First-aid measures Description of first aid measures General information Immediately remove any clothing soiled by the product. 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. (Contd. on page 2)

Product name: 2-(4-Bromophenyl)ethylamine

(Contd. of page 1) 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 Causes severe skin burns. Causes serious eye damage. 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 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 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. 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 **Frecautions for safe handling** Keep container tightly sealed. 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: Refrigerate Information about storage in one common storage facility: Protect from heat. Do not store together with acids. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Refrigerate 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

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. Do not inbale duet (smoke (mist Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. **Breathing equipment:** Use suitable respirator when high concentrations are present. Use suitable respiratory protective device in case of insufficient ventilation. 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

Eve protection: Tightly sealed goggles Full face protection Body protection: Protective work clothing.

USA

Product name: 2-(4-Bromophenyl)ethylamine

(Contd. of page 2	2)

	(Contd. of page 2
9 Physical and chemical properties	
Information on basic physical and ch General Information Appearance:	
Form: Color:	Liquid Colorless
Odor:	Not determined
Odor threshold: pH-value:	Not determined. Not determined.
Change in condition	
Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined 63-72 °C (145-162 °F) (0.2mm) Not determined
Flash point: Flammability (solid, gaseous) Ignition temperature:	113 °C (235 °F) Not determined. Not determined
Decomposition temperature: Auto igniting:	Not determined Not determined.
Danger of explosion: Explosion limits: Lower:	Not determined. Not determined
Upper: Vapor pressure:	Not determined Not determined
Density at 20 °C (68 °F):	1.29 g/cm³ (10.765 lbs/gal)
Relative density Vapor density	Not determined. Not determined.
Evaporation rate Solubility in / Miscibility with	Not determined.
Water: Partition coefficient (n-octanol/water) Viscosity:	
dynamic: kinematic:	Not determined. Not determined.
Other information	No further relevant information available.
Possibility of hazardous reactions Re Conditions to avoid No further relevan Incompatible materials: Acids Oxidizing agents Heat 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. acts with strong oxidizing agents t information available.
11 Toxicological information Information on toxicological effects	
Acute toxicity: Swallowing will lead to a LD/LC50 values that are relevant for o Skin irritation or corrosion: Causes se Eye irritation or corrosion: Causes se Sensitization: No sensitizing effects kno Germ cell mutagenicity: No effects kno Carcinogenicity: No classification data Reproductive toxicity: No effects know	evere skin burns. rious eye damage. own. own. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. rn.
Specific target organ system toxicity	 repeated exposure: No effects known. single exposure: No effects known.
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect	
12 Ecological information	
Avoid transter into the environment. Results of PBT and vPvB assessmen PBT: Not applicable. vPvB: Not applicable.	her relevant information available. relevant information available. mation available. quantities to reach ground water, water course or sewage system. t
Other adverse effects No further releva	ant information available.
13 Disposal considerations	

Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal.

(Contd. on page 4)

Am S, IATA AM Sport hazard class(es) S S S S S S S S S S S S S	
sport information Jumber Jumber, JATA UN proper shipping name G, JATA AM sport hazard class(es) s s s s s s s s s s s s s	nines, liquid, corrosive, n.o.s. (2-(4-Bromophenyl)ethylamine) IINES, LIQUID, CORROSIVE, N.O.S. (2-(4-Bromophenyl)ethylamine) Corrosive substances. C7) Corrosive substances Corrosive substances.
s 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nines, liquid, corrosive, n.o.s. (2-(4-Bromophenyl)ethylamine) IINES, LIQUID, CORROSIVE, N.O.S. (2-(4-Bromophenyl)ethylamine) Corrosive substances. C7) Corrosive substances Corrosive substances.
s Am Am Sport hazard class(es) s Am sport hazard class(es) s Am s	nines, liquid, corrosive, n.o.s. (2-(4-Bromophenyl)ethylamine) IINES, LIQUID, CORROSIVE, N.O.S. (2-(4-Bromophenyl)ethylamine) Corrosive substances. C7) Corrosive substances Corrosive substances.
S, IATA Am Sport hazard class(es) Am S 8 C S	Corrosive substances. C7) Corrosive substances Corrosive substances. t applicable. aming: Corrosive substances A, S-B atilis t applicable.
sport hazard class(es) s Solution of the second se	Corrosive substances. C7) Corrosive substances Corrosive substances. t applicable. aming: Corrosive substances A, S-B atilis t applicable.
s S S S S S S S S S S S S S S S S S S S	C7) Corrosive substances Corrosive substances. t applicable. arning: Corrosive substances A,S-B calis t applicable.
s, IATA s, III s, IATA s, III s, IATA s, III s,	C7) Corrosive substances Corrosive substances. t applicable. arning: Corrosive substances A,S-B calis t applicable.
s, IATA s, III s, IATA s, III s, IATA s, III s,	C7) Corrosive substances Corrosive substances. t applicable. arning: Corrosive substances A,S-B calis t applicable.
s, IATA s, III s, IATA s, III s, IATA s, III s,	C7) Corrosive substances Corrosive substances. t applicable. arning: Corrosive substances A,S-B calis t applicable.
S, IATA S, IMDG,	Corrosive substances. t applicable. arning: Corrosive substances A,S-B calis t applicable.
s 8 C s 8 C sting group (IMDG, IATA III ronmental hazards: Not cial precautions for user Wa Number: F-A egation groups Alka sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: ne Pollutant (DOT): No Model Regulation": UN	t applicable. aming: Corrosive substances A,S-B talis t applicable.
el 8 king group III ronmental hazards: Not cial precautions for user Wa Number: F-A vegation groups Aik sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: No ne Pollutant (DOT): No Model Regulation": UN ulatory information UN	t applicable. aming: Corrosive substances A,S-B talis t applicable.
el 8 king group III ronmental hazards: Not cial precautions for user Wa Number: F-A vegation groups Aik sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: No ne Pollutant (DOT): No Model Regulation": UN ulatory information UN	t applicable. aming: Corrosive substances A,S-B talis t applicable.
el 8 king group III ronmental hazards: Not cial precautions for user Wa Number: F-A vegation groups Aik sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: No ne Pollutant (DOT): No Model Regulation": UN ulatory information UN	t applicable. aming: Corrosive substances A,S-B talis t applicable.
ronmental hazards: Not cial precautions for user Wa Number: F-A regation groups Alka sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: ne Pollutant (DOT): No Model Regulation": UN ulatory information UN	arning: Corrosive substances A, S-B calis t applicable.
ial precautions for user Wa Number: F-A regation groups Alk sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: ne Pollutant (DOT): No Model Regulation": UN ulatory information	arning: Corrosive substances A, S-B calis t applicable.
Number: F-A egation groups Aik. sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: ne Pollutant (DOT): No Model Regulation": UN ulatory information	A,S-B calis t applicable.
sport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not sport/Additional information: ne Pollutant (DOT): Model Regulation": UN	t applicable.
sport/Additional information: ne Pollutant (DOT): No Model Regulation": UN ulatory information	
ne Pollutant (DOT): No Model Regulation": UN ulatory information	
Model Regulation": UN	
ulatory information	
05	
al word Danger ard statements 4 Causes severe skin burns and eye damage. autionary statements autionary statements	
Do not breathe dust/fume/gas/mist/vapours/spray. 3+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing 5+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Ren 2+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. 5 Store locked up.	y. Rinse skin with water/shower. nove contact lenses, if present and easy to do. Continue rinsing.
Dispose of contents/container in accordance with local/regional/n	ational/international regulations.
onal regulations product is not listed in the U.S. Environmental Protection Agency Toxic Substar search and development only. This product must be used by or directly under th uct must not be used for commercial purposes or in formulations for commercial product is not listed on the Canadian Domestic Substances List (DSL) or the Ca A Section 313 (specific toxic chemical listings) Substance is not listed.	l purposes.
ornia Proposition 65 65 - Chemicals known to cause cancer Substance is not listed. 65 - Developmental toxicity Substance is not listed. 65 - Developmental toxicity, female Substance is not listed.	
65 - Developmental toxicitý, male Substance is not listed. mation about limitation of use: For use only by technically qualified individual er regulations, limitations and prohibitive regulations stance of Very High Concern (SVHC) according to the REACH Regulations conditions of restrictions according to Article 67 and Annex XVII of the Rest	
conditions of restrictions according to Article 67 and Annex XVII of the Re tet and use must be observed. tance is not listed. ex XIV of the REACH Regulations (requiring Authorisation for use) Substan nical safety assessment: A Chemical Safety Assessment has not been carried	nce is not listed.
e r information loyers should use this information only as a supplement to other information gat	thered by them, and should make independent judgement of suitability of this his information is furnished without warranty, and any use of the product not i product or process, is the responsibility of the user.
nation to ensure proper use and protect the health and safety of employees. Th ormance with this Material Safety Data Sheet, or in combination with any other p artment issuing SDS: Global Marketing Department of preparation / last revision 11/24/2015 / -	

Safety Data Sheet per OSHA HazCom 2012

Product name: 2-(4-Bromophenyl)ethylamine

Page 5/5 Printing date 11/24/2015 Reviewed on 04/11/2014

(Contd. of page 4)

USA

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHIMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent LD50: Lethal dose, 50 percent CACGHI: 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)