



1 Identification Product identifier Product name: Bromotriphenylethylene Stock number: B23905, L01338 CAS Number: 1607-57-4 EC number: 216-531-8 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: Manufacturer/supplier. Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 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) ð GHS08 Health hazard Repr. 2 H361 Suspected of damaging fertility or the unborn child. 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 GHS08 Signal word Warning

 Signal word Warning

 Hazard statements

 H361 Suspected of damaging fertility or the unborn child.

 Precautionary statements

 P281
 Use personal protective equipment as required.

 P201
 Obtain special instructions before use.

 P202
 Do not handle until all safety precautions have been read and understood.

 P308+P313 IF exposed or concerned: Get medical advice/attention.

 P405
 Store locked understood.

P405 Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.
 WHMIS classification D2A - Very toxic material causing other toxic effects Classification system (Hazardous Materials Identification System) 1
 Image: Constraint of the sector of the se Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. 3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 1607-57-4 Bromotriphenylethylene Identification number(s): EC number: 216-531-8 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 eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. (Contd. on page 2)

Product name: Bromotrinhonylothylono			
Product name: Bromotriphenylethy			
Information for doctor		(Contd. of page 1)	
Most important symptoms and effect	is, both acute and delayed No further relevant information available. attention and special treatment needed No further relevant information available.		
5 Fire-fighting measures			
Extinguishing media	n diaxide, extinguishing nowder or water spray. Fight larger fires with water spray or alcohol resistant form		
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 bromide (HBr) Advice for firefighters			
Protective equipment:			
Wear self-contained respirator. Wear fully protective impervious suit.			
6 Appidental release massures			
6 Accidental release measures	inment and emergency procedures		
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: Dispose of contaminated material as waste according to section 13.			
Reference to other sections	Prevention of secondary hazards: No special measures required. Reference to other sections		
See Section 7 for information on safe has See Section 8 for information on person	See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.		
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 Ensure good ventilation at the workplac	containers.		
Information about protection against	explosions and fires: No information known.		
Conditions for safe storage, including Storage	g any incompatibilities		
Requirements to be met by storeroor	ns and receptacles: No special requirements.		
Information about storage in one con Further information about storage co	nmon storage facility: Store away from oxidizing agents. Inditions:		
Keep container tightly sealed. Store in cool, dry conditions in well seal			
Specific end use(s) No further relevant	t information available.		
8 Exposure controls/personal protection			
Additional information about design			
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 re-	quire monitoring at the workplace: Not required.		
Additional information: No data	1		
Exposure controls Personal protective equipment			
General protective and hygienic mea The usual precautionary measures for h	sures		
Keep away from foodstuffs, beverages a	and feed.		
Remove all soiled and contaminated clo Wash hands before breaks and at the e	Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.		
Maintain an ergonomically appropriate v	working environment. spirator when high concentrations are present.		
Protection of hands:	spirator when high concentrations are present.		
Impervious gloves Check protective gloves prior to each us	se for their proper condition.		
The selection of suitable gloves not only Penetration time of glove material (in	se for their proper condition. y depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.		
Eye protection: Safety glasses			
Body protection: Protective work cloth	ing.		
9 Physical and chemical properties			
Information on basic physical and ch General Information	iemicai properties		
Appearance: Form:	Powder		
Color:	Pale yellow		
Odor: Odor threshold:	Not determined Not determined.		
pH-value:	Not applicable.		
Change in condition Melting point/Melting range:	112-115 °C (234-239 °F)		
Boiling point/Boiling range:	Not determined		
Sublimation temperature / start:	Not determined		
Flash point: Flammability (solid, gaseous)	Not applicable Not determined.		
Ignition temperature: Decomposition temperature:	Not determined Not determined		
Auto igniting:	Not determined.	(2) (1)	
		(Contd. on page 3)	

Product name: Bromotriphenylethylene

Product name: Bromotriphenylethyl	lene		
		(Contd. of page 2)	
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits: Lower:	Not determined		
Upper:	Not determined		
Vapor pressure: Density:	Not applicable. Not determined		
Relative density	Not determined.		
Vapor density	Not applicable.		
Evaporation rate Solubility in / Miscibility with	Not applicable.		
Water:	Insoluble		
Partition coefficient (n-octanol/water) Viscosity:	: Not determined.		
dynamic:	Not applicable.		
kinematic: Other information	Not applicable. No further relevant information available.		
10 Stability 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 Hazardous decomposition products: Carbon monoxide and carbon dioxide Hydrogen bromide			
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. LD/LCSO values that are relevant for classification: No data Skin inritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Germ cell mutagenicity: No effects known. Germ cell mutagenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: Suspected of damaging fertility or the unborn child. 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: The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals: Reproductive - Paternal Effects - testes, epididymis, sperm duct. Reproductive - Paternal Effects - uterus, cervix, vagina. Reproductive - Maternal Effects - uterus, cervix, vagina. Reproductive - Maternal Effects - uterus, cervix, vagina. Additional toxicological ainformation: 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 inf Persistence and degradability No furth Bioaccumulative potential No further r Mobility in soil No further relevant infor Additional ecological information: General notes: Do not allow material to be released to t Do not allow undiluted product or large of Avoid transfer into the environment. Results of PBT and vPVB assessmen PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	her relevant information available. relevant information available. rmation available. the environment without proper governmental permits. quantities to reach ground water, water course or sewage system. t		
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 transportat	ion.		
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.	(Control	
		(Contd. on page 4)	

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USA

Product name: Bromotriphenylethylene	
	(Contd. of page 3
Transport in bulk according to Annex II of MARPOL73/78 a	
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
15 Regulatory information	
Safety, health and environmental regulations/legislation sp GHS label elements The product is classified and labeled in a Hazard pictograms	pecific for the substance or mixture accordance with 29 CFR 1910 (OSHA HCS)
GHS08	
to research and development only. This product must be used product must not be used for commercial purposes or in formu SARA Section 313 (specific toxic chemical listings) Substa California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance is n Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not list Information about limitation of use: For use only by technice Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the	Intion. Iocal/regional/national/international regulations. Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted by or directly under the supervision of a technically qualified individual as defined by TSCA. This lations for commercial purposes. Ince is not listed. isted. ed. ally qualified individuals. REACH Regulations (EC) No. 1907/2006. Substance is not listed. Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the Intion for use) Substance is not listed.
16 Other information Employers should use this information only as a supplement to information to ensure proper use and protect the health and sa conformance with this Material Safety Data Sheet, or in combin	o other information gathered by them, and should make independent judgement of suitability of this Ifety of employees. This information is furnished without warranty, and any use of the product not in Ination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: RID: Réglement international concernant le transport des marchandises dangereus IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Asso ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Air Transport Asso ICAO: International Instructions by the "International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization IATA: International Air Transport Association IATA: International Air Transport Association IEINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LCS0: Lethal concentration, 50 percent LDS0: Lethal dose, 50 percent WPUB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA)	ses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ciation" (IATA) CAO)

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)