



(Contd. on page 2)

1 Identification
Product identifier Product name: 4-Bromobenzenesulfonamide
Stock number: L08602
CAS Number: 701-34-8 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development
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. 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)
GHS06 Skull and crossbones
Acute Tox. 3 H301 Toxic if swallowed.
GHS07
Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiration. 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
GHS06
Signal word Danger Hazard statements H301 Toxic if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements PRECAUTIONARY statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/ P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification D1B - Toxic material causing immediate and serious toxic effects
D1B - Toxic material causing immediate and serious toxic effects D2B - Toxic material causing other toxic effects
Classification system HMIS ratings (scale 0-4)
(Hazardouš Materials Identification System)
FRE Flammability = 1 REACTIVITY 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: 701-34-8 4-Bromobenzenesulfonamide
4 First-aid measures
After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. (Contd. on page 2)

Safety Data Sheet per OSHA HazCom 2012

Product name: 4-Bromobenzenesulfonamide	
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. 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 treatment needed No further relevant information available.	(Contd. of page 1)
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 Sulfur oxides (SOx) 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 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. 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 solied 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 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: Crystalline powder Color: White Odor: Not determined Odor threshold: Not determined.	
pH-value: Not determined. Not applicable.	
	(Contd. on page 3)

Product name: 4-Bromobenzenesulfonamide

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Product name: 4-Bromobenzenesulf	onamide	
		(Contd. of page 2)
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	164-167 °C (327-333 °F) Not determined Not determined	
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not applicable Not determined. Not determined Not determined Not determined.	
Danger of explosion: Explosion limits:	Product does not present an explosion hazard.	
Lower: Upper: Vapor pressure:	Not determined Not determined Not applicable.	
Density: Relative density Vapor density	Not determined Not determined. Not applicable.	
Evaporation rate Solubility in / Miscibility with Water:	Not applicable. Insoluble	
Partition coefficient (n-octanol/water): Viscosity: dynamic:	Not determined. Not applicable.	
kinematic: Other information	Not applicable. No further relevant information available.	
10 Stability and reactivity		
Reactivity No information known. Chemical stability Stable under recomn Thermal decomposition / conditions to Possibility of hazardous reactions No Conditions to avoid No further relevant Incompatible materials: Oxidizing agen Hazardous decomposition products: Carbon monoxide and carbon dioxide Sulfur oxides (SOX) Nitrogen oxides Hydrogen bromide	b be avoided: Decomposition will not occur if used and stored according to specifications. dangerous reactions known information available.	
Reproductive toxicity: No effects know Specific target organ system toxicity - Specific target organ system toxicity - Aspiration hazard: No effects known. Subacute to chronic toxicity: No effect	in irritation. ious eye irritation. wn. on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. n. repeated exposure: No effects known. single exposure: May cause respiratory irritation.	
12 Ecological information Toxicity		
Aquatic toxicity: No further relevant info Persistence and degradability No furth Bioaccumulative potential No further re Mobility in soil No further relevant inforr Additional ecological information: General notes:	er relevant information available. elevant information available.	
13 Disposal considerations Waste treatment methods Recommendation Consult state, local o Uncleaned packagings: Recommendation: Disposal must be ma	r national regulations to ensure proper disposal. ade according to official regulations.	
14 Transport information Not a hazardous material for transportation	on.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	(Contd. on page 4)
		USA USA

	Reviewed on 12/18/
oduct name: 4-Bromobenzenesulfonamide	
	(Contd. of pa
Transport hazard class(es)	
DOT, ADR, IMDG, IATA Class	None
Packing group DOT, IMDG, IATA	
	None
Environmental hazards: Special precautions for user	Not applicable. Not applicable.
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
Regulatory information	
Safety, health and environmental regulations/legislation sp GHS label elements The product is classified and labeled in a Hazard pictograms	secific for the substance or mixture ccordance with 29 CFR 1910 (OSHA HCS)
$\mathbf{\nabla}$	
GHS06	
Signal word Danger Hazard statements	
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P261 Avoid breathing dust/fume/gas/mist/vapours	s/spray.
P280 Wear protective gloves/protective clothing/e P301+P310 IF SWALLOWED: Immediately call a POISC	vé prótection/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.
P405 Store locked up. P501 Dispose of contents/container in accordance	e with local/regional/national/international regulations.
National regulations '	с с с
to research and development only. This product must be used l	Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restr by or directly under the supervision of a technically qualified individual as defined by TSCA. This
product must not be used for commercial purposes or in formula SARA Section 313 (specific toxic chemical listings) Substar	látions for commercial purposes.
California Proposition 65	
Prop 65 - Chemicals known to cause cancer Substance is no Prop 65 - Developmental toxicity Substance is not listed.	ot listed.
Prop 65 - Developmental toxicity, female Substance is not listed.	sted.
Prop 65 - Developmental toxicity, female Substance is not list Prop 65 - Developmental toxicity, male Substance is not liste Information about limitation of use: For use only by technica	>d.
Other regulations, limitation of use: For use only by technica	illy qualified individuals.
Substance of Very High Concern (SVHC) according to the I	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
market and use must be observed.	Annex X VII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on
Substance is not listed.	tion for use) Substance is not listed
Annex XIV of the REACH Regulations (requiring Authorisat Chemical safety assessment: A Chemical Safety Assessmen	
Other information	
Employers should use this information only as a supplement to information to ensure proper use and protect the health and sat	other information gathered by them, and should make independent judgement of suitability of thi fety of employees. This information is furnished without warranty, and any use of the product not
conformance with this Material Safety Data Sheet, or in combin	nation 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: Reglement international concernant le transport des marchandises dangereuse IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Assoc	es par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ciation" (IATA)
ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (IC	:AO)
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)	
RID: Reglement international concernant le transport des marchandises dangereuss IATA-DER: Dangerous Goods Regulations by the "International Air Transport Assoc ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (IC IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association (AA: 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 I D50: I ethal dose 50 percent	
LUDU: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent	
LD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA)	
LCSO: Letrial concentration, so percent LDSO: Letrial dose, 50 percent VPVB: 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) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)	