



Reviewed on 10/07/200
1 Identification
Product identifier Product name: <b>4-Bromo-3-fluorobenzenesulfonamide</b>
Stock number: L19707
<b>CAS Number:</b> 263349-73-1
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. 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)
GHS07
Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation. 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
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/fume/gas/mist/vapours/sprav
P280 Wear protective gloves/protective clothing/eye protection/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. P304+P340 IF INHALED; Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification
D2B - Toxic material causing other toxic effects
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Classification system
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
HEALTH I Health (acute effects) = 1
FIRE     I       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:
263349-73-1 '4-Bromo-3-fluorobenzenesulfonamide
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 eve contact Rinse opened eve for several minutes under running water. Then consult a doctor.
After swallowing Seek medical treatment. (Contd. on page
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## (Contd. of page 1) 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. 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 Hydrogen fluoride (HF) Hydrogen fluoride (HF) Hydrogen bromide (HBr) Sulfur oxides (SOx) Nitrogen oxides (NOx) Hydrogen cyanide (HCN) Advice for firefighters Protective equipment: Woot ord: controod room! 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 The usual 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 Odor: Not determined Odor threshold: Not determined pH-value: Not applicable Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 137-141 °C (279-286 °F) Not determined Not determined Flash point: Not applicable Flammability (solid, gaseous) Not determined. (Contd. on page 3)

## Product name: 4-Bromo-3-fluorobenzenesulfonamide

		(Contd. of page 2
Ignition temperature: Decomposition temperature: Auto igniting:	Not determined Not determined Not determined.	
Danger of explosion: Explosion limits: Lower:	Product does not present an explosion hazard.	
Upper:	Not determined Not determined	
Vapor pressure: Density:	Not applicable. Not determined	
Relative density Vapor density	Not determined. Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water:	Insoluble	
Partition coefficient (n-octanol/wat Viscosity:	ter): Not determined.	
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 reco Thermal decomposition / condition Possibility of hazardous reactions Conditions to avoid No further relev Incompatible materials: Oxidizing a Hazardous decomposition product Carbon monoxide and carbon dioxide Hydrogen fluoride Hydrogen bromide Sulfur oxides (SOX) Nitrogen oxides Hydrogen cyanide	vant information available. Indents	
Reproductive foxicity: No effects kr Specific target organ system toxic Specific target organ system toxic Aspiration hazard: No effects known Subacute to chronic toxicity: No ef	or classification: No data s skin irritation. serious eye irritation. known. known. ata on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. nown. <b>ity - repeated exposure:</b> No effects known. <b>ity - single exposure:</b> May cause respiratory irritation. n.	
12 Ecological information Toxicity Aquatic toxicity: No further relevant Persistence and degradability No fi Bioaccumulative potential No furthe Mobility in soil No further relevant in Additional ecological information: General notes: Do not allow material to be released to Avoid transfer into the environment. Results of PBT and vPvB assessm PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	further relevant information available. er relevant information available. nformation available. to the environment without proper governmental permits. <b>nent</b>	
Uncleaned packagings:	cal or national regulations to ensure proper disposal. e made according to official regulations.	
<b>14 Transport information</b> Not a hazardous material for transpor	rtation.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA Transport hazard class(es)	None	
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DOT, ADR, IMDG, IATA Class	None	
DOT, ADR, IMDG, IATA Class Packing group DOT, IMDG, IATA	None	

roduct name: 4-Bromo-3-fluorobenzenesulfonal	
	(Contd. of page
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73	
Transport/Additional information:	Not dangerous according to the above specifications.
DOT Marine Pollutant (DOT):	No
marmor endant (Berr)	
5 Regulatory information Safety, health and environmental regulations/legislati GHS label elements The product is classified and labeled Hazard pictograms	ion specific for the substance or mixture ed 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/fume/gas/mist/va P280 Wear protective gloves/protective cloth	thing/eve protection/face protection.
P305+P351+P338 IF IN EYES: Rinše cautiously with wat P304+P340 IF INHALED: Remove person to fresh P405 Store locked up. P501 Dispose of contents/container in accor National regulations This product is not listed in the U.S. Environmental Protect to research and development only. This product must be a product must not be used for commercial purposes or in f SARA Section 313 (specific toxic chemical listings) St California Proposition 65 Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity, Substance is not listed Prop 65 - Developmental toxicity, male Substance is no Information about limitation of use: For use only by tec Other regulations, limitations and prohibitive regulation	ter for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. air and keep comfortable for breathing. rdance with local/regional/national/international regulations. rction Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restric used by or directly under the supervision of a technically qualified individual as defined by TSCA. This formulations for commercial purposes. Substance is not listed. rd. r and listed. rot listed. chnically qualified individuals. forms o the REACH Regulations (EC) No. 1907/2006. Substance is not listed. r and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on t porisation for use) Substance is not listed.
5 Other information Employers should use this information only as a supplement information to ensure proper use and protect the health at	nent to other information gathered by them, and should make independent judgement of suitability of this and safety of employees. This information is furnished without warranty, and any use of the product not in combination with any other product or process, is the responsibility of the user.
Dote of proporation / lost revision 11/04/0015'	ngereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ort Association" (IATA) tion" (ICAO) ty)
USHA: Uccupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EP4: Environmental Portertion Agency (USA)	