

# Safety Data Sheet per OSHA HazCom 2012

1 Identification	
Product identifier Product name: <b>3-Bromo-2-chloro-6-methylpyridine</b>	
Stock number: H64153	
CAS Number: 185017-72-5	
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	
Acute Tox. 4 H302 Harmful if swallowed. Acute Tox. 4 H312 Harmful in contact with skin.	
Acute Tox. 4 H332 Harmful if inhaled.	
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 H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H315 Causes skin irritation.	
H319 Causes serious eye irritation. H335 May cause respiratory irritation. <b>Precautionary statements</b>	
P261 Avoid breathing dust/fume/gas/mist/vapours/spray. 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 tresh 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 D1B - Toxic material causing immediate and serious toxic effects	
D2B - Toxic material causing other toxic effects	
Classification system	
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)	
HEALTH 2 Health (acute effects) = 2 FIRE 1 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:	
185017-72-5 3-Bromo-2-chloro-6-methylpyridine	
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.	l. on page 2)
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#### Product name: 3-Bromo-2-chloro-6-methylpyridine

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.

#### 5 Fire-fighting measures

Extinguishing 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 chloride (HCI) 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: 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 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. The storage facility: Store away from oxidiz 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: 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

Not determined

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 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 type P100 (USA) or P3 (EN 143) cartridges 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. Protection of hands: Impervious gloves

Odor:

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:** Safety glasses **Body protection:** Protective work clothing.

9 Physical and chemica	Physical and chemical properties nformation on basic physical and chemical properties Senaral Information			
Information on basic phy General Information				
Appearance:				
Form:	Solid			
Form: Color:	Solid Off-white			

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duct name. 3-Bromo-2-cmoro-0					
	(Contd. d				
Odor threshold:	Not determined.				
pH-value:	Not applicable.				
Change in condition					
Melting point/Melting range:	Not determined				
Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined				
Flammability (solid, gaseous)	Not determined				
Ignition temperature:	Not determined				
Decomposition temperature:	Not determined				
Auto igniting:	Not determined.				
Danger of explosion:	Not determined.				
Explosion limits: Lower:	Not determined				
Upper:	Not determined				
Vapor pressure:	Not applicable.				
Density:	Not determined				
Relative density	Not determined.				
Vapor density <sup>*</sup> Evaporation rate	Not applicable. Not applicable.				
Solubility in / Miscibility with	Not applicable.				
Water: Not determined					
Partition coefficient (n-octanol/water): Not determined.					
Viscosity:	Net				
dynamic: kinematic:	Not applicable. Not applicable.				
Other information	Not applicable.				
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 Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides Hydrogen bromide					
Toxicological information					
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Information on toxicological effects					

## 1

Acute toxicity: Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Harmful if swallowed. Danger through skin absorption. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: Causes skin irritation. Eye irritation or corrosion: Causes serious eye irritation. Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No effects known. Sensitic tarret or an exetem toxicity - repeated exposure: No effects known Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: 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 information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: General notes: Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment **PBT:** Not applicable. **vPvB:** Not applicable. **Other adverse effects** No further relevant information available. 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 UN-Number DOT, IMDG, IATA UN2811 UN proper shipping name DOT Toxic solids, organic, n.o.s. (3-Bromo-2-chloro-6-methylpyridine)

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## Safety Data Sheet per OSHA HazCom 2012

Product name: 3-Bromo-2-chloro-6-methylpyridine					
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IMDG, IATA	TOXIC SOLID, ORGANIC, N.O.S. (3-Bromo-2-chloro-6-methylpyridine)				
Transport hazard class(es) DOT					
×					
Class	6.1 Toxic substances.				
Label Class	6.1 6.1 (T2) Toxic substances				
Label IMDG, IATA	6.1				
Class	6.1 Toxic substances.				
Label	6.1				
Packing group DOT, IMDG, IATA	III				
Environmental hazards:	Not applicable.				
Special precautions for user EMS Number:	Warning: Toxic substances F-A.S-A				
Transport in bulk according to Annex II of MARPOL73/78	)				
Transport/Additional information:					
DOT Marina Pollutant (DOT):	No				
Marine Pollutant (DOT): UN "Model Regulation":	No UN2811, Toxic solids, organic, n.o.s. (3-Bromo-2-chloro-6-methylpyridine), 6.1, III				
Signal word Warning Hazard statements         H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H315 Causes skin irritation. H315 Causes serious eye irritation. H316 Causes serious eye irritation. H317 Causes serious eye irritation. H319 Causes eye irritation. H319 Causes eye irritation. H319 Causes eye irritation is for seriar and keep comfortable for breathing. H310 FP340 IF IN EYES: Rinse caulously with water for several minutes. Remove person to fresh air and keep comfortable for breathing. H310 FP340 IF IN EYES: Rinse caudously with water for several minutes. Remove eyesion of a technicality qualified individual as defined by TSCA. This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Ist (NDSL). 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, female Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Information about limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulation (EC) No 1907/2006. Substance is not listed. The conditions of restrict					
6 Other information Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDE: International Maritime Code for Dangerous Goods DOT: US Department of Transportation 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 Date of Dependent (Concentration, 50 percent Date of Dependence (Date (Date System (Canada)) LC50: Lethal concentration, 50 percent					
LD50: Lethal dose, 50 percent vPvB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA)					
Action - American Connectice of Covernmental Industrial Hygienists (USA)	(Contd. on page 5) USA				

### Product name: 3-Bromo-2-chloro-6-methylpyridine

OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA) (Contd. of page 4)

USA