



1 Identification Product identifier Product name: 4-Amino-5-bromopyrimidine Stock number: H64335 CAS Number: 1439-10-7 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 Alla Aesai Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 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. 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 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements D061 Precautionary statements 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 fresh air and keep comfortable for breathing. P405 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 Т Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
 EALTH
 2
 Health (acute effects) = 2

 RE
 1
 Flammability = 1

 EACTIVITY
 1
 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: 1439-10-7 4-Amino-5-bromopyrimidine 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. (Contd. on page 2)

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Pre	oduct name: 4-Amino-5-bromopyrimidine			
	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)		
ł	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.			
ć	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 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	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.			
٤	B 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. 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 Personal protective end hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all solled 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. Breating 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 dee purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards. 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. Eye protection: Salety glasses	termine if air-		
Body protection: Protective work clothing. 9 Physical and chemical properties				
	Information on basic physical and chemical properties General Information Appearance: Form: Powder Color: Pale brown Odor: Not determined Odor threshold: Not determined.			
	pH-value: Not applicable.			
	Change in condition Melting point/Melting range: 207-211 °C (405-412 °F) Boiling point/Boiling range: Not determined	(Oantida and C		
		(Contd on page 3)		

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Product name: 4-Amino-5-bromopy	rimidine		
		(Contd. of page 2)	
Sublimation temperature / start: Flammability (solid, gaseous)	Not determined Not determined.		
Ignition temperature:	Not determined		
Decomposition temperature: Auto igniting:	Not determined Not determined.		
Danger of explosion:	Not determined.		
Explosion limits: Lower:	Not determined		
Upper:	Not determined		
Vapor pressure: Density:	Not applicable. Not determined		
Relative density	Not determined.		
Vapor density Evaporation rate	Not applicable. Not applicable.		
Solubility in / Miscibility with Water:	Not determined		
Partition coefficient (n-octanol/water			
Viscosity: 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 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			
Reproductive toxicity: No effects kno Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effe	skin irritation. erious eye irritation. nown. nown. a on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. wn. - repeated exposure: No effects known. - single exposure: May cause respiratory irritation.		
12 Ecological information Toxicity Aquatic toxicity: No further relevant in Persistence and degradability No further Bioaccumulative potential No further Mobility in soil No further relevant info Additional ecological information: General notes: Do not allow undiluted product or large Avoid transfer into the environment. Results of PBT and vPvB assessmen PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relev	ther relevant information available. relevant information available. rmation available. quantities to reach ground water, water course or sewage system. nt		
13 Disposal considerations			
Waste treatment methods	the transferred to a process disposed		
Uncleaned packagings:	or national regulations to ensure proper disposal.		
Recommendation: Disposal must be n	nade according to official regulations.		
14 Transport information			
UN-Number			
DOT, ADN, IMDG, IATA	Not applicable		
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable		
Transport hazard class(es)			
DOT, ADR, ADN, IMDG, IATA			
Class	Not applicable		
Packing group DOT, IMDG, IATA	Not applicable		
Environmental hazards:	Not applicable.		
Special precautions for user	Not applicable.		
		(Contd. on page	

(Contd. on page 4)

Product name: 4-Amino-5-bromopyrimidine		
(Contd. of page 3)		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.		
Transport/Additional information:		
DOT Marine Pollutant (DOT): No		
UN "Model Regulation":		
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture 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 Harmful if swallowed. H315 Causes serious eye irritation. H315 Causes serious eye irritation. H315 Causes serious eye irritation. H316 Causes serious eye irritation. H326 Causes serious eye irritation. H326 May cause respiratory irritation. H326 May cause respiratory irritation. H327 May cause respiratory irritation. H326 May cause respiratory irritation. H327 May cause respiratory irritation. H326 May cause respiratory irritation. H327 May cause respiratory irritation. H326 May cause respiratory irritation. H326 May cause respiratory irritation. H327 May cause respiratory irritation. H328 May cause respiratory irritation. H328 May cause respiratory irritation is respiratory irritation is respiratory irritation. H328 May cause respiratory irritation is respiratory irritation is respiratory irritation. H328 May cause respiratory irritation is respiratory irritation is respiratory irritation is respiratory irritation is respiratory irritation. H328 May cause respiratory irritation is respiratory is respirat		
16 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 11/23/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transportation CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHIMS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent WPVB: 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 Ca EPA: Environmental Protection Agency (USA)

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