



Reviewed on 11/11/201
1 Identification
Product identifier Product name: <b>4-Acetamidobenzeneboronic acid</b>
Stock number: H52987
CAS Number: 101251-09-6
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. <b>Precautionary statements</b>
P261 Avoid breathing dust/fume/gas/mist/vanours/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.
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
(T)
Classification system HMIS ratings (scale 0-4)
(Hazardouš Materials Identification System)
FIRE     I 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:
101251-09-6 4-Acetamidobenzeneboronic acid
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 USA

## Product name: 4-Acetamidobenzeneboronic acid (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 Nitrogen oxides (NOx) Boron oxide Possibly Hydrogen cyanide (HCN) 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: 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: 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 equipment General protective and hygienic measures 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 Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable 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: Powder Grey to brown Not determined Color: Odor: Odor threshold: Not determined pH-value: Not applicable. Change in condition Melting point/Melting range: 215-220 °C (419-428 °F) Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Not determined Not determined Not determined. Ignition temperature: Not determined (Contd. on page 3)

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	(Contd. of page
Decomposition temperature:	Not determined
Auto igniting:	Not determined.
Danger of explosion: Explosion limits:	Not determined.
Lower: Upper:	Not determined Not determined
Vapor pressure:	Not applicable.
Density: Relative density	Not determined Not determined.
Vapor density	Not applicable.
Evaporation rate Solubility in / Miscibility with	Not applicable.
Water:	Not determined
Partition coefficient (n-octanol/wat Viscosity:	r): 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 reco Thermal decomposition / condition	mmended storage conditions. <b>s to be avoided</b> : Decomposition will not occur if used and stored according to specifications.
Possibility of hazardous reactions	No dangerous reactions known
Conditions to avoid No further relev Incompatible materials: Oxidizing a	int information available.
Hazardous decomposition product	
Carbon monoxide and carbon dioxide Nitrogen oxides	
Boron oxide	
Possibly Hydrogen cyanide (HCN)	
11 Toxicological information	
Information on toxicological effect	
Acute toxicity: No effects known. LD/LC50 values that are relevant for	r classification: No data
Skin irritation or corrosion: Causes	skin irritation.
Eye irritation or corrosion: Causes	perious eye irritation.
Sensitization: No sensitizing effects Germ cell mutagenicity: No effects	nown. nown.
Carcinogenicity: EPA-1: Data are ina	nown. nown. dequate for an assessment of human carcinogenic potential.
<b>Reproductive toxicity.</b> No effects ki	own. y - repeated exposure: No effects known.
Specific target organ system toxic	y - single exposure: May cause respiratory irritation.
Aspiration hazard: No effects known Subacute to chronic toxicity: No ef	ects known
	: 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	nformation available.
Persistence and degradability No fill	rther relevant information available.
Bioaccumulative potential No furthe Mobility in soil No further relevant in	ormation available.
Additional ecological information:	
General notes: Do not allow material to be released a	the environment without proper governmental permits.
Do not allow undiluted product or larg Avoid transfer into the environment.	e quantities to reach ground water, water course or sewage system.
Results of PBT and vPvB assessm	nt
PBT: Not applicable. vPvB: Not applicable.	
Other adverse effects No further rel	vant information available.
13 Disposal considerations	
Waste treatment methods	
Recommendation Consult state, loc	l or national regulations to ensure proper disposal.
Uncleaned packagings:	made according to official regulations.
Recommendation. Disposal must be	
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	Notannlicable
Environmental hazards:	Not applicable Not applicable.
	Not applicable.
Special precautions for user	ex II of MARPOL73/78 and the IBC Code Not applicable.

(Contd. on page 4) USA Safety Data Sheet per OSHA HazCom 2012

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Product name: 4-Acetamidobenzeneboronic acid		
Transport/Additional information:	(Contd. of page 3)	
DOT		
Marine Pollutant (DOT):	No	
UN "Model Regulation":		
15 Regulatory information Safety, health and environmental regulations GHS label elements The product is classified a Hazard pictograms	s/legislation specific for the substance or mixture and labeled in accordance with 29 CFR 1910 (OSHA HCS)	
GHS07		
<ul> <li>National regulations</li> <li>This product is not listed in the U.S. Environmer to research and development only. This product product must not be used for commercial purpos SARA Section 313 (specific toxic chemical li California Proposition 65</li> <li>Prop 65 - Chemicals known to cause cancer Prop 65 - Developmental toxicity Substance is Prop 65 - Developmental toxicity, female Subs Prop 65 - Developmental toxicity, male Subst Information about limitation of use: For use o Other regulations, limitations and prohibitive Substance of Very High Concern (SVHC) acc The conditions of restrictions according to A market and use must be observed.</li> </ul>	istings) Substance is not listed. Substance is not listed. is not listed. bstance is not listed. tance is not listed. only by technically qualified individuals. e regulations cording to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. Cording to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the ring Authorisation for use) Substance is not listed.	
information to ensure proper use and protect the conformance with this Material Safety Data She	a supplement to other information gathered by them, and should make independent judgement of suitability of this e health and safety of employees. This information is furnished without warranty, and any use of the product not in set, or in combination with any other product or process, is the responsibility of the user.	
Department issuing SDS: Global Marketing De Date of preparation / last revision 11/24/2015 Abbreviations and acronyms: RID: Reglement international concernant le transport des march ICAD: International Civil Aviation Organization ADR: Accord européen sur le transport des marchandises dang IMDE: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods Construction (California) CAS: Chemical Abstracts Service (division of the American Che HMIS: Hazardous Materials Information System (USA) WHMIS: Workplace Hazardous Materials Information System (C LCSG): Lethal concentration, 50 percent UDSD: Lethal concentration, 50 percent VPVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygie	5 / - handises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) gereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) emical Society) Canada)	

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)