



	Reviewed on 05/19/2008
1 Identification	
Product identifier Product name: <b>3-Chloro-5-methoxybenzeneboronic acid</b>	
Stock number:	
915201-07-9 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	028-0780
	) 920-0789.
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.	
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.         H335 May cause respiratory irritation.         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         P304+P340       IF INHALED: Remove person to fresh air and keep comfortable for breathing.         P405       Store locked up.	rinsing.
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)	
(Hazardous Materials Identification System)         HEALTH       II       Health (acute effects) = 1         FIRE       II       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:	
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: 3-Chloro-5-methoxybenzeneboronic 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 Hydrogen chloride (HCl) Boron oxide 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: 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 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: Powder Color: White Odor: Not determined Odor threshold: Not determined pH-value: Not applicable. Change in condition 185-189 °C (365-372 °F) Not determined Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Flash point: Not applicable Flammability (solid, gaseous) Not determined Ignition temperature: Decomposition temperature: Not determined Not determined

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Product name: 3-Chloro-5-methoxy	benzeneboronic acid	
	(Contd. of page 2)	
Auto igniting:	Not determined.	
Conditions to avoid No further releval Incompatible materials: Oxidizing age Hazardous decomposition products: Carbon monoxide and carbon dioxide	Not applicable. Not applicable. No further relevant information available. nmended storage conditions. <b>to be avoided:</b> Decomposition will not occur if used and stored according to specifications. lo dangerous reactions known nt information available. ents	
Hydrogen chloride (HCl) Boron oxide		
11 Toxicological information Information on toxicological effects Acute toxicity: No effects known. 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: Data are inadequate for an assessment of human carcinogenic potential. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Specific target organ system toxicity - single exposure: May cause respiratory irritation. Aspiration hazard: No effects known. Subacute to chronic toxicity: Boron affects the central nervous system. Boron poisoning causes depression of the circulation, persistant vomiting and diarrhea, followed by profound shock and coma. The temperature may become subnormal and a scarletina form rash may cover the entire body. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.		
Avoid transfer into the environment. Results of PBT and vPvB assessmen PBT: Not applicable. vPvB: Not applicable.	relevant information available. ormation available. the environment without proper governmental permits. <b>nt</b>	
Other adverse effects No further relev	rant 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 Not a hazardous material for transporta	ntion.	
UN-Number DOT, IMDG, IATA	None	
UN proper shipping name DOT, IMDG, IATA	None	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA Class	None	
Packing group DOT, IMDG, IATA		
DOT, IMDG, IATA Environmental hazards:	None Not applicable.	
Special precautions for user	Not applicable. Not applicable.	
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(Contd. on page 4)

Product name: 3-Chloro-5-methoxybenzeneboronic acid		
	(Contd. of page 3	
Transport in bulk according to Annex II of MARPOL73		
Transport/Additional information:	Not dangerous according to the above specifications.	
DOT Marine Pollutant (DOT):	No	
15 Regulatory information		
Safety, health and environmental regulations/legislatio GHS label elements The product is classified and labeled Hazard pictograms	on specific for the substance or mixture I 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/vaj	pours/spray.	
P304+P340 IF INHALED: Remove person to fresh a	hing/eye protection/face protection. er for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. air and keep comfortable for breathing.	
P405 Store locked up. P501 Dispose of contents/container in accord	dance with local/regional/national/international regulations.	
National regulations	tion Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted	
to research and development only. This product must be u product must not be used for commercial purposes or in for SARA Section 313 (specific toxic chemical listings) Su	used by or directly under the supervision of a technically qualified individual as defined by TSCA. This ormulations for commercial purposes.	
California Proposition 65		
Prop 65 - Chemicals known to cause cancer Substance Prop 65 - Developmental toxicity Substance is not listed		
Prop 65 - Developmental toxicity, female Substance is I Prop 65 - Developmental toxicity, male Substance is no	not listed.	
Information about limitation of use: For use only by tech	hnically qualified individuals.	
Other regulations, limitations and prohibitive regulatic Substance of Very High Concern (SVHC) according to	ons the REACH Regulations (EC) No. 1907/2006. Substance is not listed.	
The conditions of restrictions according to Article 67 a	and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the	
<i>market and use must be observed.</i> Substance is not listed.		
Annex XIV of the REACH Regulations (requiring Author Chemical safety assessment: A Chemical Safety Assess	prisation for use) Substance is not listed.	
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information to ensure proper use and protect the health ar	ent to other information gathered by them, and should make independent judgement of suitability of this of safety of employees. This information is furnished without warranty, and any use of the product not in ombination 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 / -		
ADD/eviations and acronyins: RID: Règlement international concernant le transport des marchandises dang IATA DOB: Departure Coode Degrutations by the "International Air Transport	gereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)	
ICAO: Thernational Civil Aviation Organization		
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	1)	
HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada)	·	
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent		
VFVB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA)		
NTP: National Toxicology Program (USA) IARC: International Agency for Research on Cancer	gereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ft Association" (IATA) ion" (ICAO) /)	

IARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)