# Safety Data Sheet



Page 1/4 Printing date 02/03/2017 Revision date 02/02/2017

Revision d	date 02/03/2017 date 02/02/2017
1 Identification Product identifier Product name: <u>Ethylboronic acid</u>	
Stock number: L19959 CAS Number: 4433-63-0 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	
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) 928-078	89.
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 P280 Wear protective gloves. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. WHMIS classification D2B - Toxic material causing other toxic effects	
Classification system	
HMIS ratings (scale 0-4)         (Hazardous Materials Identification System)         HEALTH       I         Health (acute effects) = 1         FIRE       I         Flammability = 1	
REACTIVITY 1) Physical Házard = 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: 4433-63-0 Ethylboronic acid Concentration: ≤100%	
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. Information for doctor	
Most important symptoms and effects, both acute and delayed Causes skin irritation.	
Causes serious eye irritation.	Contd. on page 2)

(Contd. of page 1)

## Product name: Ethylboronic acid

#### cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed No further relevant information available

#### 5 Fire-fighting measures

Extinguishing media 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 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 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: 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 Handle under dry protective gas. Keep container tightly sealed. 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: Refrigerate Information\_about storage in one common storage facility: Store away from air. Protect from heat. Store away from oxidizing agents. **Further information about storage conditions:** Store under dry inert gas. This product is air sensitive. Keep container tightly sealed. Refrigerate Refrigerate 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 ersonal 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.

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 N95 (USA) or PE (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 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 chemical properties

Information on basic physical and ch General Information Appearance:	
Form:	Powder or flakes
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:	84-88 °C (183-190 °F) Not determined Not determined

(Contd. on page 3)

# Product name: Ethylboronic acid

Page 3/4 Printing date 02/03/2017 Revision date 02/02/2017

Product name: Ethylboronic acid				
	(Contd. of page			
Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not determined. Not determined Not determined. Not determined.			
Danger of explosion:	Not determined.			
Explosion limits: Lower:	Not determined			
Upper: Vapor pressure:	Not determined Not applicable. Not determined			
Density: Relative density	Not determined Not determined.			
Vapor density Evaporation rate	Not applicable. Not applicable.			
Solubility in / Miscibility with Water:	Not determined			
Partition coefficient (n-octanol/water Viscosity:				
dynamic: kinematic: Other information	Not applicable. Not applicable. No further relevant information available.			
10 Stability and reactivity				
Reactivity No information known.				
Chemical stability Stable under recon Thermal decomposition / conditions	to be avoided: Decomposition will not occur if used and stored according to specifications.			
Possibility of hazardous reactions R Conditions to avoid No further releval	eacts with strong oxidizing agents			
Incompatible materials: Air				
Öxidizing agents Heat				
Hazardous decomposition products. Carbon monoxide and carbon dioxide	:			
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.				
Eve irritation or corrosion: Causes s	erious eve irritation.			
Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: EPA-I: Data are inadequate for an assessment of human carcinogenic potential.				
<b>Reproductive toxicity:</b> 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. Carcinogenic categories				
	ealth Administration) Substance is not listed.			
12 Ecological information				
Toxicity Aquatic toxicity: No further relevant ir Persistence and degradability No fur	iformation available.			
<b>Bioaccumulative potential</b> No turther	relevant information available			
Mobility in soil No further relevant info Additional ecological information:	ormation available.			
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				
<b>PBT:</b> Not applicable. <b>vPvB:</b> Not applicable.				
Other adverse effects No further relev	rant information available.			
13 Disposal considerations				
	or national regulations to ensure proper disposal.			
Uncleaned packagings: Recommendation: Disposal must be i				
14 Transport information				
UN-Number DOT, ADN, IMDG, IATA	Not applicable			
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable			
Transport hazard class(es)	····			
DOT, ADR, ADN, IMDG, IATA Class	Not applicable			
Packing group DOT, ADR, IMDG, IATA				
DOT, ADR, IMDG, IATA	Not applicable (Contd. on page			



USA

Product name: Ethylboronic acid

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Environmental hazards:	Not applicable.			
Special precautions for user	Not applicable.			
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



Signal word Warning Hazard statements

Hazara statements H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. **Precautionary statements** D290

P280 Wear protective gloves. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P305+P351+P338 IF IN ÉYES: Rinše cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. National regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (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, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity and prohibitive regulations

Other regulations, limitation or use: For use only by technically qualified individuals. Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 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 Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this 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 02/03/2017 / Abbreviations and accords:
Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
OT: US Department of Transportation
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials (dentification System (USA)
WHMIS: Warkplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
UD50: US Dercent
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CAS: Chemical Abstract Service (division (USA)
WHMIS: Warkplace Hazardous Materials (Hypienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
HARC: International Agency (USA)
Swin Inti: 2: Skin corrosion/intiation, Hazard Category 2A
Eye Inti. 24: Serious eye damage/eye Irritation, Hazard Category 2A
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3