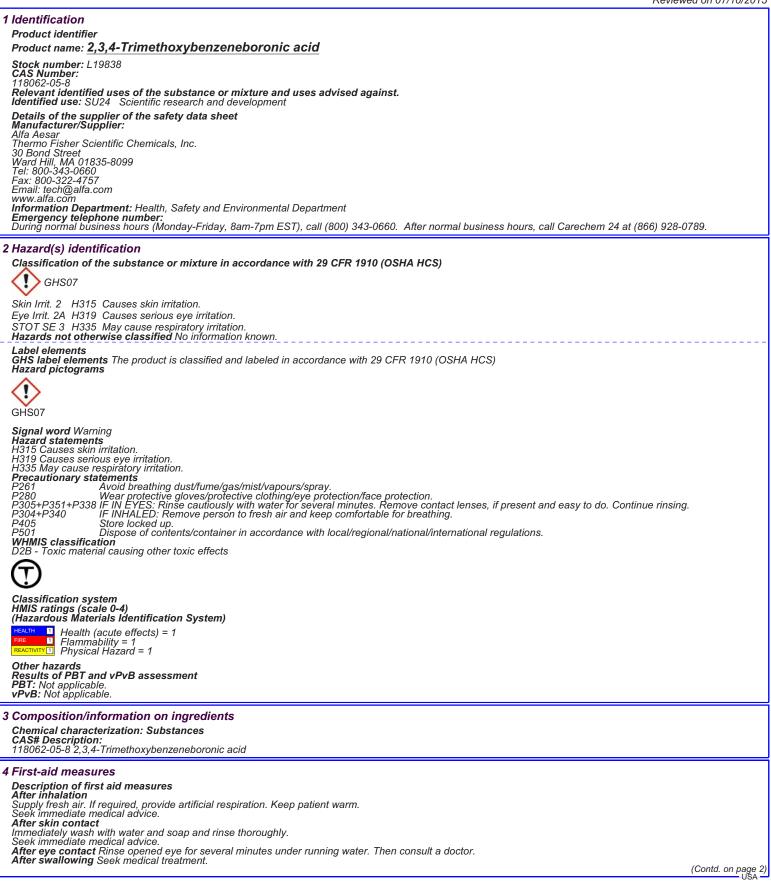


## Safety Data Sheet per OSHA HazCom 2012



(Contd. of page 1)

## Product name: 2,3,4-Trimethoxybenzeneboronic acid

## 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 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 product to reach sewage system or any water course. Environmental precautions: Do not allow product to reach sewage system or any water 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. Ensure good ventilation at the workplace. Information about protection against explosions and fires: No information known. Conditions for safe storage, including any incompatibilities Storage Storage Requirements to be met by storerooms and receptacles: Store in freezer (-20 °C). Information about storage in one common storage facility: Protect from heat. Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. 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 equipment 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 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 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 chemical properties General Information Appearance: Form: Crystalline White Not determined Color: Odor: Odor threshold: Not determined. pH-value: Not applicable

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature:	74-79 °C (165-174 °F) Not determined Not determined Not determined Not determined Not determined	
		(Contd. on page 3)
Decomposition temperature:	Not determined	(Contd. on page 3) USA



## Product name: 2,3,4-Trimethoxybenzeneboronic acid

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Product name: 2,3,4-Trimethoxyber		
Auto impition	(Contd. o	of page 2
Auto igniting:	Not determined. Not determined.	
Danger of explosion: Explosion limits:	Not determined.	
Lower:	Not determined Not determined	
Upper: Vapor pressure:	Not applicable.	
Density:	Not determined	
Relative density Vapor density	Not determined. Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water:	Not determined	
Partition coefficient (n-octanol/water		
Viscosity:	·	
dynamic: kinematic:	Not applicable. Not applicable	
Other information	Not applicable. No further relevant information available.	
10 Stability and reactivity		
10 Stability and reactivity Reactivity No information known.		
Chemical stability Stable under recorr	nmended storage conditions.	
Thermal decomposition / conditions	nmended storage conditions. t <b>o be avoided:</b> Decomposition will not occur if used and stored according to specifications.	
Possibility of hazardous reactions R Conditions to avoid No further relevan	eacts with strong oxidizing agents nt information available	
Incompatible materials:		
Oxidizing 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 s	skin irritation.	
Eye irritation or corrosion: Causes se Sensitization: No sensitizing effects kr	erious eye irritation. nown	
Germ cell mutagenicity: No effects kn	nown. Jequate for an assessment of human carcinogenic potential.	
Carcinogenicity: EPA-1: Data are inad	lequate for an assessment of human carcinogenic potential.	
Reproductive toxicity: No effects know Specific target organ system toxicity	wn. • - repeated exposure: No effects known	
Specific target organ system toxicity	<b>y - repeated exposure:</b> No effects known. <b>y - single exposure:</b> May cause respiratory irritation.	
Aspiration hazard: No effects known. Subacute to chronic toxicity: No effe		
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 in	ıformation available.	
Aquatic toxicity: No further relevant in Persistence and degradability No fur Bioaccumulative potential No further	ther relevant information available.	
Mobility in soil No further relevant info	relevant information available. ormation available	
Additional ecological information:		
General notes:	quantities to reach ground water, water course or sewage system.	
Avoid transfer into the environment.	quantities to reach ground water, water course or sewage system.	
Results of PBT and vPvB assessmer	nt	
<b>PBT:</b> Not applicable. <b>vPvB:</b> Not applicable.		
Other adverse effects No further relev	/ant 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 n	made according to official regulations	
Neconinentation. Disposar must be n		
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.	
Transport in bulk according to Anne.	ex II of MARPOL73/78 and the IBC Code Not applicable.	
	(Contd. or	n page 4

Safety Data Sheet per OSHA HazCom 2012	Page 4/4 Prințing date 11/24/2015
2.2.4 Trimethow how conchered	Reviewed on 0//10/2015
Product name: 2,3,4-Trimethoxybenzeneboro	
Transport/Additional information:	(Contd. of page 3)
DOT	
Marine Pollutant (DOT):	No
UN "Model Regulation":	
15 Regulatory information	
Safety, health and environmental regulations/leg GHS label elements The product is classified and la Hazard pictograms	<b>jislation specific for the substance or mixture</b> abeled 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/m P280 Wear protective gloves/protective P305+P351+P338 IF IN EYES: Rinse cautiously with P304+P340 IF INHALED: Remove person to 1 P405 Store locked up. P501 Dispose of contents/container in a National regulations This product is not listed in the U.S. Environmental F to research and development only. This product must product must not be used for commercial purposes of This product is not listed on the Canadian Domestic SARA Section 313 (specific toxic chemical listing California Proposition 65 Prop 65 - Developmental toxicity, substance is not Prop 65 - Developmental toxicity, female Substance Information about limitation of use: For use only b Other regulations, limitations and prohibitive reg Substance of Very High Concern (SVHC) accordi	e clothing/eyé prótection/face protection. th water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. fresh air and keep comfortable for breathing. accordance with local/regional/national/international regulations. Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted st be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This or in formulations for commercial purposes. Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL). gs) Substance is not listed. stance is not listed. t listed. t listed. by technically qualified individuals. gulations ing to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. 16 7 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the Authorisation for use) Substance is not listed.
information to ensure proper use and protect the hea conformance with this Material Safety Data Sheet, or	oplement to other information gathered by them, and should make independent judgement of suitability of this alth and safety of employees. This information is furnished without warranty, and any use of the product not in or in combination with any other product or process, is the responsibility of the user.
Department issuing SDS: Global Marketing Depart. Date of preparation / last revision 11/24/2015 / - Abbreviations and acronyms:	tment

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) 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 LD50: Lethal dose, 50 percent WPS: very Persistent and very Bioaccumulative AVBI: Hamerican Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) NTP: National Toxicology Program (USA) NTP: National Toxicology Program (USA)

USA