

Safety Data Sheet per OSHA HazCom 2012

1 Identification
Product identifier Product name: 4-(Isopropoxycarbonyl)benzeneboronic acid
Stock number: H53335
CAS Number: 342002-82-8
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 The <u>r</u> mo F <u>i</u> sher 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
\sim
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
\wedge
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/vapours/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.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. WHMIS classification P2B. Toxin meterial ocuping other toxin effects
D2B - Toxic material causing other toxic effects
\bigcirc
Classification system
HMIS ratings (scale 0-4) (Hazardous Materials Identification System)
HEALTH I Health (acute effects) = 1 FIRE I Flammability = 1
REACTIVITY] 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:
342002-82-8 4-(Isopropoxycarbonyl)benzeneboronic 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 śwallowing Seek medical tréatment. (Contd. on page (Contd. on page 1)

Auto igniting:

Not determined

Product name: 4-(IsopropoxycarbonyI)benzeneboronic 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 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 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 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 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: Solid Color: White 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: 111 °C (232 °F) Not determined Not determined Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Not determined Not determined Not determined

(Contd. on page 3)

Product name: 4-(Isopropoxycarbonyl)benzeneboronic acid

Page 3/4 Printing date 11/24/2015 Reviewed on 03/07/2012

Product name: 4-(Isopropoxycarbor	yl)benzeneboronic acid	
		(Contd. of page 2)
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water) Viscosity: dynamic: kinematic: Other information	Not determined. Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable. Not determined. Not determined. Not determined. Not determined. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. No further relevant information available.	
10 Stability and reactivity Reactivity No information known. Chemical stability Stable under recomm Thermal decomposition / conditions to Possibility of hazardous reactions Re Conditions to avoid No further relevan. Incompatible materials: Oxidizing ager Hazardous decomposition products: Carbon monoxide and carbon dioxide Boron oxide	information available.	
Reproductive toxicity: No effects know Specific target organ system toxicity Specific target organ system toxicity Aspiration hazard: No effects known. Subacute to chronic toxicity: No effec	in irritation. ious eye irritation. wm. quate for an assessment of human carcinogenic potential. n. • repeated exposure: No effects known. • single exposure: May cause respiratory irritation.	own.
12 Ecological information Toxicity Aquatic toxicity: No further relevant inf Persistence and degradability No furth Bioaccumulative potential No further r Mobility in soil No further relevant infor Additional ecological information: General notes: Do not allow material to be released to t Do not allow undiluted product or large of Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable. Other adverse effects No further relevant	er relevant information available. elevant information available. mation available. ne environment without proper governmental permits. uantities to reach ground water, water course or sewage system.	
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		
UN-Number DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name		
DOT, ADN, IMDG, IATA Transport hazard class(es)	Not applicable	
DOT, ADR, ADN, IMDG, IATA	A 1 1 1 1	
Class Packing group	Not applicable	
Packing group DOT, IMDG, IATA	Not applicable	
Environmental hazards: Special precautions for user	Not applicable. Not applicable.	
	Il of MARPOL73/78 and the IBC Code Not applicable.	
Transport/Additional information:		
DOT	<i>N</i> .	
Marine Pollutant (DOT):	No	(Contd. on page 4,

Page 4/4 Printing date 11/24/2015 Reviewed on 03/07/2012

Product name: 4-(IsopropoxycarbonyI)benzeneboronic acid

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

 Piol
 Dispose of contents/container in accordance with local/regional/national/international regulations.

 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.

 California Proposition 65

 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.

 Information abut limitation of 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.

 P501 Dispose of contents/container in accordance with local/regional/national/international regulations. 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 Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. 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 11/24/2015 / Abbreviations and acronyms:
RD: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ADR: Accord européen sur le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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 Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
DOT: US Department of Transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
UST: Workplace Hazardous Materials Information System (Canada)
USO: Lethal concentration, 50 percent
LD50: Lethal concentration, 50 percent
USO: Lethal dose, 50 percent
USO: 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) USA

(Contd. of page 3)