Printing date 07/19/2021

Reviewed on 07/14/2021

1 Identification

- · Product name
- · Trade name: Phenylboronic acid, min. 97%
- Item number: 93-0570
- \cdot Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Strem Chemicals, Inc. 7 Mulliken Way NEWBURYPORT, MA 01950 USA info@strem.com
- Information department: Technical Department
 Emergency telephone number: EMERGENCY: CHEMTREC: +1 (800) 424-9300 During normal opening times: +1 (978) 499-1600

2 Hazard(s) identification

· Classification of the substance or mixture



Acute Tox. 4 H302 Harmful if swallowed.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning

dihydroxy(pher	
Hazard statem	ents
H302 Harmful	if swallowed.
Precautionary	statements
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P	2338 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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
	(Contd. on page 2)

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Trade name: Phenylboronic acid, min. 97% (Contd. of page 1) · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 0Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 10 FIRE Fire = 0**REACTIVITY O** *Reactivity* = 0· Other hazards · Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

98-80-6 dihydroxy(phenyl)borane

97.087%

4 First-aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Immediately call a doctor.
- · 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

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	(Contd. of page
Environmental precautions: No special measures required.	
Methods and material for containment and cleaning up:	
Dispose contaminated material as waste according to item 13.	
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.	
Protective Action Criteria for Chemicals	
Protective Action Criteria for Chemicals PAC-1:	
	2.2 mg/m3
PAC-1:	2.2 mg/m3
PAC-1: 98-80-6 dihydroxy(phenyl)borane	2.2 mg/m3 24 mg/m3
PAC-1: 98-80-6 dihydroxy(phenyl)borane PAC-2:	I

7 Handling and storage

- · Handling:
- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · 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: Not required.
- · Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · 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: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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Safety Data Sheet according to OSHA HCS

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· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• *Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

• Eye protection: Safety glasses

9 Physical and chemical properties

General Information		
Appearance:		
Form:	Powder	
Color:	Whitish	
Odor: Odor threshold:	Odorless Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	217-220 °C (423-428 °F)	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with Water at 20 °C (68 °F):	10 g/l	
Partition coefficient (n-octanol/wat	e r): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
Organic solvents:	0.0 %	



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CHEMICALS.

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Trade name: Phenylboronic acid, min. 97%

0.0 g/l / 0.00 lb/gl

100.0 %

Solids content: • Other information

No further relevant information available.

5

10 Stability and reactivity

- *Reactivity* No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

98-80-6 dihydroxy(phenyl)borane

Oral LD50 740 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- \cdot on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information: Harmful

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- \cdot Additional ecological information:
- · General notes: Not known to be hazardous to water.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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Trade name: Phenylboronic acid, min. 97%

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· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information · UN-Number · DOT, ADN, IMDG, IATA not regulated · UN proper shipping name · DOT, ADN, IMDG, IATA not regulated · Transport hazard class(es) · DOT, ADN, IMDG, IATA · Class not regulated · Packing group · DOT, IMDG, IATA not regulated · Environmental hazards: · Marine pollutant: No · Special precautions for user Not applicable. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · UN "Model Regulation": not regulated

15 Regulatory information

- \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- · TSCA (Toxic Substances Control Act):
- All ingredients are listed.

· Proposition 65

- · Chemicals known to cause cancer:
- None of the ingredients is listed.
- · Chemicals known to cause reproductive toxicity for females:
- None of the ingredients is listed.

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I (oral)

Trade name: Phenylboronic acid, min. 97%

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

 \cdot Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

98-80-6 dihydroxy(phenyl)borane

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Warning

• *Hazard-determining components of labeling: dihydroxy(phenyl)borane*

· Hazard statements

H302 Harmful if swallowed.

· Precautionary statements

- P262 Do not get in eyes, on skin, or on clothing.
- *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.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- *P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Technical Department.
- · Contact: Technical Director
- · Date of preparation / last revision 07/19/2021 / -
- 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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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Trade name: Phenylboronic acid, min. 97%

CAS: Che	emical Abstracts Service (division of the	e American Chemical Society)	
NFPA: No	ational Fire Protection Association (U	VSA)	
HMIS: Ha	azardous Materials Identification Sys	em (USA)	
VOC: Vol	latile Organic Compounds (USA, EU)		
LC50: Let	thal concentration, 50 percent		
LD50: Let	thal dose, 50 percent		
PBT: Pers	sistent, Bioaccumulative and Toxic		
vPvB: ver	ry Persistent and very Bioaccumulativ	2	
NIOSH: N	National Institute for Occupational Sa	fety	
OSHA: O	ccupational Safety & Health		
TLV: Thre	eshold Limit Value		
PEL: Peri	missible Exposure Limit		
REL: Reco	commended Exposure Limit		
Acute Tox	x. 4: Acute toxicity – Category 4		

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