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Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 11.08.2010 Revision: 11.08.2010

1 Identification of substance

Product details

2-Bromopyridine-4-boronic acid Trade name

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: **Emergency information:**

Product safety department.

Giftnotruf Universität Mainz / Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Xi Irritant

Warning

Information pertaining to particular dangers

for man and environment

GHS label elements

R 36/37/38 Irritating to eyes, respiratory system and skin.

H315 - Causes skin irritation.

Prevention: Response:

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).

Storage:

Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)

2-Bromopyridine-4-boronic acid (CAS# 458532-94-0): 100%

4 First aid measures

After inhalation After skin contact Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Seek immediate medical advice.

Instantly 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 doctor.

After swallowing Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its

products of combustion or flue gases:

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Can be released in case of fire: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

Hydrogen bromide (HBr) Boron oxide

Protective equipment:

Wear self-contained breathing apparatus. Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting:

Additional information:

Wear protective equipment. Keep unprotected persons away.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits.

Ensure adequate ventilation.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

Handling Information for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Keep ignition sources away - Do not smoke.

Information about protection against explosions and fires:

Storage Requirements to be met by storerooms and

containers: Information about storage in one common

storage facility: Further information about storage

conditions:

No special requirements.

Not required.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

8 Exposure controls and 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.

Components with critical values that require monitoring at the workplace:

(Contd. on page 2)

(Contd. of page 1)

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Additional information: No data

Personal protective equipment General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
Check protective gloves prior to each use for their proper condition.
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.

Breathing equipment: Protection of hands:

Material of gloves

varies from manufacturer to manufacturer.

Penetration time of glove material

Eye protection: **Body protection:** Impervious gloves Not determined Safety glasses Face protection Protective work clothing.

9 Physical and chemical properties:

General Information

Powder Form: Colour: White Smell: Not determined

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 176°C (dec) Not determined Not determined Flash point: Not applicable

Ignition temperature: Not determined **Decomposition temperature:** Not determined Danger of explosion: Product is not explosive.

Critical values for explosion:

_ower: Not determined Upper: Not determined Steam pressure: Not determined **Density** Not determined

Solubility in / Miscibility with

Water:

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

Dangerous reactions:

Dangerous products of decomposition:

No decomposition if used and stored according to specifications. Oxidizing agents

No dangerous reactions known

Insoluble

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen bromide

Boron oxide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye:

Sensitizátion: Additional toxicological information: Irritant for skin and mucous membranes. Irritant effect.

No sensitizing effect known.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
EPA-I: Data are inadequate for an assessment of human carcinogenic potential.

12 Ecological information:

Additional ecological information: General notes:

Generally not hazardous for water. Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleaned packagings: Recommendation:

Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
ADR/RID-GGVS/E Class:
None

Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: Marine pollutant:

None No

Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:

None

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Transport/Additional information: Not dangerous according to the above specifications. (Contd. of page 2)

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Risk phrases:

36/37/38 Irritating to eyes, respiratory system and skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves.

Xi Irritant

National regulations

Water hazard class:

Safety phrases:

Information about limitation of use:

For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed.

Generally not hazardous for water.

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.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Zachariah Holt
Abbreviations and acronyms:

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Applications acronyms:

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