

A CENTRAL GLASS CO., LTD. COMPANY 3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

Page: 1

Compilation date: 10/08/2011

Revision date: 12/07/2017

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: 3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

CAS number: 330793-09-4

Product code: OR10625

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

| Company name: | Apollo Scientific Ltd |
|---------------|--|
| | Units 3 & 4 |
| | Parkway |
| | Denton |
| | Manchester |
| | M34 3SG |
| | UK |
| Tel: | 0161 337 9971 |
| Fax: | 0161 336 6932 |
| Email: | david.tideswell@apolloscientific.co.uk |

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

| Classification under CLP: | Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; Acute Tox. 4: |
|---------------------------------|---|
| | H312; Acute Tox. 4: H332 |
| Most important adverse effects: | Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes |
| | serious eye irritation. Harmful if inhaled. May cause respiratory irritation. |

2.2. Label elements

Label elements:

| Hazard statements: | H302: Harmful if swallowed. |
|--------------------|---|
| | H312: Harmful in contact with skin. |
| | H315: Causes skin irritation. |
| | H319: Causes serious eye irritation. |
| | H332: Harmful if inhaled. |
| | H335: May cause respiratory irritation. |

Signal words: Warning

3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

Page: 2

Hazard pictograms: GHS07: Exclamation mark



Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.

P271: Use only outdoors or in a well-ventilated area.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: 3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

CAS number: 330793-09-4

Section 4: First aid measures

| 4.1. Description of first aid mea | asures |
|---|---|
| Skin contact: | Remove all contaminated clothes and footwear immediately unless stuck to skin. |
| | Drench the affected skin with running water for 10 minutes or longer if substance is still |
| | on skin. Consult a doctor. |
| Eye contact: | Bathe the eye with running water for 15 minutes. Consult a doctor. |
| Ingestion: | Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water |
| | to drink immediately. Consult a doctor. |
| Inhalation: | Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a |
| | doctor. |
| 4.2. Most important symptoms and effects, both acute and delayed | |
| Skin contact: | There may be irritation and redness at the site of contact. |
| Eye contact: | There may be irritation and redness. The eyes may water profusely. |
| Ingestion: | There may be soreness and redness of the mouth and throat. Nausea and stomach |
| | pain may occur. There may be vomiting. |
| Inhalation: | There may be irritation of the throat with a feeling of tightness in the chest. |
| 4.3. Indication of any immediate medical attention and special treatment needed | |
| Postion 5. Five fighting monourse | |
| ection 5: Fire-fighting measu | 169 |
| 5.1. Extinguishing media | |
| | |

Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes. Nitrogen oxides (NOx). Borane/boron oxides.

3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate

method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of dust in the air. Only

use in fume hood.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Store under Argon.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.

Hand protection: Protective gloves.

3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

Page: 4

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| State: | Solid | | |
|-------------------------------|---|-------|--------------------|
| Evaporation rate: | No data available. | | |
| Oxidising: | No data available. | | |
| Solubility in water: | Insoluble | | |
| Viscosity: | No data available. | | |
| Boiling point/range ℃: | No data available. Melting point/range | ∍°C: | 148-153 |
| Flammability limits %: lower: | No data available. up | per: | No data available. |
| Flash point ℃: | No data available. Part.coeff. n-octanol/wa | iter: | No data available. |
| Autoflammability℃: | No data available. Vapour press | ure: | No data available. |
| Relative density: | No data available. | pH: | No data available. |
| VOC g/l: | No data available. | | |
| | | | |

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

Page: 5

Relevant hazards for product:

| Hazard | Route | Basis |
|-------------------------------|-------------|-----------------------|
| Acute toxicity (ac. tox. 4) | INH DRM ING | Hazardous: calculated |
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |
| STOT-single exposure | INH | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Persistent chemical (predicted *)

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

 Disposal operations:
 MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

 Disposal of packaging:
 Dispose of as special waste in compliance with local and national regulations Observe

all federal, state and local environmental regulations.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

3-AMINOBENZENEBORONIC ACID, PINACOL ESTER, N-BOC PROTECTED

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

Section 16: Other information

Other information

| Other information: | This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. |
|------------------------------|---|
| | * Data predicted using computational software. The OECD QSAR-Toolbox for grouping |
| | chemicals into categories. Developed by LMC bulgaria. |
| | http://echa.europa.eu/support/oecd-qsar-toolbox |
| Phrases used in s.2 and s.3: | H302: Harmful if swallowed. |
| | H312: Harmful in contact with skin. |
| | H315: Causes skin irritation. |
| | H319: Causes serious eye irritation. |
| | H332: Harmful if inhaled. |
| | H335: May cause respiratory irritation. |
| Legal disclaimer: | The material is intended for research purposes only and should be handled exclusively |
| | by those who have been fully trained in safety, laboratory and chemical handling |
| | procedures. The above information is believed to be correct to the best of our |
| | knowledge. The above information is believed to be correct to the best of our knowledge |
| | at the date of its publication, but should not be considered to be all inclusive. It should |
| | be used only as a guide for safe handling, storage, transportation and disposal. We |
| | cannot guarantee that the hazards detailed in this document are the only hazards that |
| | exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held |
| | liable for any damage resulting from handling or from contact with the above product. |