

# **Apollo Scientific**

Part Number: **OR4249** Version No: **1.1** Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878) Chemwatch Hazard Alert Code: 2

Issue Date: 18/05/2022 Print Date: 03/08/2023 S.REACH.GBR.EN

# SECTION 1 Identification of the substance / mixture and of the company / undertaking

# 1.1. Product Identifier

Product name	2-Chloro-5-methylbenzeneboronic acid			
Chemical Name	2-Chloro-5-methylbenzeneboronic acid			
Synonyms	Available Available			
Chemical formula				
Other means of identification	Not Available			
CAS number	193353-35-4*			

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

Relevant identified uses	Not Available	
Uses advised against	No specific uses advised against are identified.	

### 1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Apollo Scientific		
Address	Whitefield Road, Bredbury SK62QR United Kingdom		
Telephone	1614060505		
Fax 0161 406 0506			
Website	http://www.apolloscientific.co.uk/		
Email	sales@apolloscientific.co.uk		

# 1.4. Emergency telephone number

Association / Organisation	lot Available	
Emergency telephone numbers	Not Available	
Other emergency telephone numbers	Not Available	

# **SECTION 2 Hazards identification**

# 2.1. Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments <sup>[1]</sup>	H335 - Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, H315 - Skin Corrosion/Irritation Category 2, H319 - Serious Eye Damage/Eye Irritation Category 2
Legend:	1. Classified by Chemwatch: 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

### 2.2. Label elements

Hazard pictogram(s)	
Signal word	Warning

# Hazard statement(s)

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

# Supplementary statement(s)

Not Applicable

# Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.	
P261	Avoid breathing dust/fumes.	
P280	Wear protective gloves, protective clothing, eye protection and face protection.	
P264	Wash all exposed external body areas thoroughly after handling.	

# Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.			
P337+P313	If eye irritation persists: Get medical advice/attention.			
P302+P352	F ON SKIN: Wash with plenty of water.			
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.			
P332+P313	If skin irritation occurs: Get medical advice/attention.			
P362+P364	Take off contaminated clothing and wash it before reuse.			

# Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

# Precautionary statement(s) Disposal

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
	Dispesse of contents/container to databased and adde of opesial waste concentent point in accordance with any local regulation

# 2.3. Other hazards

REACH - Art.57-59: The mixture does not contain Substances of Very High Concern (SVHC) at the SDS print date.

# **SECTION 3 Composition / information on ingredients**

# 3.1.Substances

1. CAS No 2.EC No 3.Index No 4.REACH No	%[weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
Not Available	100	2-Chloro- 5-methylbenzeneboronic acid	Not Applicable	Not Applicable	Not Available

Legend: 1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L; \* EU IOELVs available; [e] Substance identified as having endocrine disrupting properties

See 'Information on ingredients' in section 3.1

# **SECTION 4 First aid measures**

# 4.1. Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin or hair contact occurs:</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
Inhalation	<ul> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

# 4.2 Most important symptoms and effects, both acute and delayed

See Section 11

# 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### **SECTION 5 Firefighting measures**

### 5.1. Extinguishing media

There is no restriction on the type of extinguisher which may be used.

Use extinguishing media suitable for surrounding area.

### 5.2. Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.

# 5.3. Advice for firefighters

Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> <li>Equipment should be thoroughly decontaminated after use.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Non combustible.</li> <li>Not considered a significant fire risk, however containers may burn.</li> <li>May emit corrosive fumes.</li> </ul>

### **SECTION 6 Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

See section 8

### 6.2. Environmental precautions

See section 12

### 6.3. Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing dust and contact with skin and eyes.</li> <li>Wear protective clothing, gloves, safety glasses and dust respirator.</li> <li>Use dry clean up procedures and avoid generating dust.</li> <li>Sweep up, shovel up or</li> </ul>

	<ul> <li>Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).</li> <li>Place spilled material in clean, dry, sealable, labelled container.</li> </ul>
Major Spills	<ul> <li>Moderate hazard.</li> <li>CAUTION: Advise personnel in area.</li> <li>Alert Emergency Services and tell them location and nature of hazard.</li> <li>Control personal contact by wearing protective clothing.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Recover product wherever possible.</li> <li>IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal.</li> <li>ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.</li> <li>If contamination of drains or waterways occurs, advise Emergency Services.</li> </ul>

### 6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

# **SECTION 7 Handling and storage**

# 7.1. Precautions for safe handling

Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>DO NOT allow material to contact humans, exposed food or food utensils.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>Use good occupational work practice.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.</li> </ul>	
Fire and explosion protection	See section 5	
<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry area protected from environmental extremes.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>For major quantities:</li> <li>Consider storage in bunded areas - ensure storage areas are isolated from sources of community waters stormwater, ground water, lakes and streams}.</li> <li>Ensure that accidental discharge to air or water is the subject of a contingency disaster management prosultation with local authorities.</li> </ul>		

# 7.2. Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Lined metal can, lined metal pail/ can.</li> <li>Plastic pail.</li> <li>Polyliner drum.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	None known  Store under argon
Hazard categories in accordance with Regulation (EC) No 1272/2008	Not Available
Qualifying quantity (tonnes) of dangerous substances as referred to	Not Available

in Article 3(10) for the application of

# 7.3. Specific end use(s)

See section 1.2

# **SECTION 8 Exposure controls / personal protection**

### 8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
Not Available	Not Available	Not Available

\* Values for General Population

# Occupational Exposure Limits (OEL)

### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Not Available						

### Not Applicable

# Emergency Limits

Ingredient	TEEL-1	TEEL-2		TEEL-3
2-Chloro- 5-methylbenzeneboronic acid	Not Available	Not Available		Not Available
Ingredient	Original IDLH		Revised IDLH	
2-Chloro- 5-methylbenzeneboronic acid	Not Available		Not Available	

### 8.2. Exposure controls

8.2.1. Appropriate engineering controls	(a) particle dust respirators, if necessary, combined with an absorption cartridge.		the worker and ventilation n air contaminant if l or contaminant in use. particulates are relatively y protection should be
	Type of Contaminant:	Air Speed:	
	direct spray, spray painting in shallow booths, drum filling, discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)	
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).		2.5-10 m/s (500-2000 f/min.)
	Within each range the appropriate value depends on:		
	Lower end of the range	Upper end of the range	
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	
	·		

3: Intermittent, low production.       3: High production, heavy use         4: Large hood or large air mass in motion       4: Small hood-local control only         Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction point of example, should be a minimum of 4-10 m/s (800-2000 f/min) for extraction of crusher dusts generated 2 metror distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.         8.2.2. Individual protection measures, such as personal protective equipment       • Safety glasses with side shields.         • Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]       • Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy		2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity		
4. Large hood or large at mass in motion       4. Smalt hood-local control only         Simple theory shows that at velocity fails rapidly with distance away from the opening of a simple excision poin. Simple theory shows that at velocity fails rapidly with distance away from the opening of a simple excision point. The atvelocity at the extinction point observes the simple excision of the extinction of the opening of a simple excision. The atvelocity at the extinction point observes the simple excision of the extinction opening of a simple excision. The atvelocity at the extinction opening of a simple excision opening of the extinction opening of a simple excision opening of the extinction opening of the extinct op					
Hendeling       Single theory shows that all velocity fails rapidly with distance sexus from the opening of a single scates/in pripe. Velocity groundly decreases with the sexus of of datace from the susceice opening. Therefore the all spool at the single scale in the sexus of point. The sexus of the sexue of the se					
messures, such as personal protection equipment         Select glasses with side shiels.           Even and face protection equipment         • Select glasses with side shiels.           Even and face protection         • Select glasses with side shiels.           Even and face protection         • Select glasses with side shiels.           Even and face protection         • Select glasses with side shiels.           Even and face protection         • Select glasses with side shiels.           Even and face protection         • Select glasses with side shiels.           Even and face protection below         • Select face glasses with side shiels.           Skin protection         • Select face glasses with side shiels.           Skin protection         • Selection of subscing blasses of the side provement should be transent in house and account of liguy experience.           Skin protection         Selection of subscing blasses with side shields.           Skin protection below         • Selection of subscing blasses with side shields.           The selection of subscing blasses with mession of subscing shields.         • Brassing ligging blasses with side shields.           Personal hyperies is a key element of differite hand care. Glaves must only be worn on clean hands. After using gloves, hands should be washed and dired throughly, Application of a non-perfundel moistures is recommended.           Personal hyperies is a key element of differite hand care. Glaves must only be worn on clean hands. After using glov		Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 4-10 m/s (800-2000 f/min) for extraction of crusher dusts generated 2 metre distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are			
<ul> <li>P: Chemical gogGies, IASNZS 1337.1, EN166 or national equivalent]</li> <li>Contract lenss may pose a special heards in the control lenss may absob and concentrate initiants. A written policy decument, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and absorption to the class of chemicals in use and an accound be reality available. In the event of chemical exposure, begin eye imgaton immediately and remove contact there as a soon as practicable. Lens should be removed at the first signs of eye redress or inflation - lens should be removed in a clasen environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].</li> <li>Skin protection</li> <li>See Hend protection below</li> <li>The selection of subtable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chenical is a proparation of several subtances, the resistance of the glove material in a source and that stherefore to be checked prior to the application. The exact break through time for subtances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried through). Application of a non-perturned missturies in scenemended. Subtable values and grint or induced contact may occur, a glove with a protection class of 50 enigher (breakthrough time greater than 240 minutes according to EN 374, ASNZS 2161.10.1 or national equivalent) is recommended.</li> <li>When only bief cortact is expected, a glove with a protection class of 30 r higher (breakthrough time protection gloves should be replated on the exact ongo contact, eleve with ASANSZ 2161.10.1 or national equivalent) is recommended.</li>     &lt;</ul>	measures, such as personal protective				
<ul> <li>Hands/feet protection</li> <li>Hands/feet protection</li> <li>Contaminated gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can no to eciduated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</li> <li>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</li> <li>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:         <ul> <li>frequency and duration of contact,</li> <li>chemical resistance of glove material,</li> <li>glove thickness and</li> <li>detecting loves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</li> <li>When only biel contact is expected, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent).</li> <li>When only biel contact is expected, a glove with a protection class of 5 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>Contaminated gloves should be replaced.</li> <li>So defined in ASTM F7.39-06 in any applications, gloves with a hitchces typically greater than 0.35 mm, are recommended.</li></ul></li></ul>	Eye and face protection	<ul> <li>Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers</li> </ul>			
<ul> <li>Hands/feet protection</li> <li>As defined in ASTM F.739-90 (a) thickness is not necessarily a good predictor of glove material degrades</li> <li>Contaminated gloves should be replaced.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account when considering gloves is detected by minimated.</li> <li>Some glove polymer types are less affected by maximum and this should be taken into account when considering gloves in the resultance of glove material degrades</li> <li>Constanting of the system of the results and the resu</li></ul>	Skin protection	See Hand protection below			
<ul> <li>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfunded moisturiser is recommended.</li> <li>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:         <ul> <li>frequency and duration of contact.</li> <li>chemical resistance of glove material.</li> <li>glove thickness and</li> <li>dexterity</li> </ul> </li> <li>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</li> <li>When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.1 or national equivalent) is recommended.</li> <li>When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time sea cording to EN 374, AS/NZS 2161.1 or national equivalent) is recommended.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>Contaminated gloves should be replaced.</li> <li>As defined in ASTM F-739-96 in any application, gloves are rated as:         <ul> <li>fixeellent when breakthrough time &gt; 480 min</li> <li>Good when breakthrough time &gt; 480 min</li> <li>Good when breakthrough time &gt; 20 min</li> <li>Fai when playsized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as th             thorough times, also and the glove material. Therefore, glove selection             should be mephasized that glove thickness is not necessarily a good predictor of the ogive model. Therefore, glove selection             should be to the glove will be dependent on the ex</li></ul></li></ul>		manufacturer to manufacturer. Where the chemical 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. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be			
<ul> <li>Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.</li> <li>polychloroprene.</li> <li>nitrile rubber.</li> <li>butyl rubber.</li> </ul>	<ul> <li>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using glos should be washed and dired thoroughly. Application of a non-perfumed moisturiser is recommended.</li> <li>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:         <ul> <li>frequency and duration of contact,</li> <li>chemical resistance of glove material,</li> <li>glove thickness and</li> <li>dexterity</li> </ul> </li> <li>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</li> <li>When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time relevant).</li> <li>When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account when considering long-term use.</li> <li>Contaminated gloves should be replaced.</li> <li>As defined in ASTM F-739-96 in any application, gloves are rated as:         <ul> <li>Excellent when breakthrough time &gt; 420 min</li> <li>Good when breakthrough time &gt; 20 min</li> <li>Fair when breakthrough time &gt; 20 min</li> <li>Fair when glove material degrades</li> <li>For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.</li> <li>It should be emphasized that glove thickness is not necessarily a good predict or of glove resistance to a specific che manufacturers technical data should always be taken into account to the most appropriate glove Note: Depending on the glove mither and kowidege of breakthrough times. Glove thore based on consideratio</li></ul></li></ul>				

	Gloves should be examined for wear and/ or degradation constantly.	
Body protection	See Other protection below	
Other protection	<ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>	

#### **Respiratory protection**

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*		PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

\* - Negative pressure demand \*\* - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

· Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.

• The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

• Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be advernment mandated or vendor recommended.

• Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

• Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

· Use approved positive flow mask if significant quantities of dust becomes airborne.

· Try to avoid creating dust conditions.

### 8.2.3. Environmental exposure controls

See section 12

### **SECTION 9** Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Appearance	White		
Physical state	Solid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	203-205	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available

Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available
Nanoform Solubility	Not Available	Nanoform Particle Characteristics	Not Available
Particle Size	Not Available		

# 9.2. Other information

Not Available

# **SECTION 10 Stability and reactivity**

10.1.Reactivity	See section 7.2	
10.2. Chemical stability	Product is considered stable and hazardous polymerisation will not occur.	
10.3. Possibility of hazardous reactions	See section 7.2	
10.4. Conditions to avoid	See section 7.2	
10.5. Incompatible materials	See section 7.2	
10.6. Hazardous decomposition products	See section 5.3	

# **SECTION 11 Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on toxicological effects

Inhaled       using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable measures be used in an occupational setting.         Ingestion       The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is be of the lack of corroborating animal or human evidence.         Skin Contact       The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable be used in an occupational setting.         Eye       This material can cause eye irritation and damage in some persons.         Chronic       Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.         2-Chloro- 5-methylbenzeneboronic acid       TOXICITY       IRRITATION         Not Available       Not Available       Not Available         1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.			_	
Ingestion       of the lack of corroborating animal or human evidence.         Skin Contact       The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directi using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable be used in an occupational setting.         Eye       This material can cause eye irritation and damage in some persons.         Chronic       Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Direct using animal models); nevertheless exposure by all routes should be minimised as a matter of course.         2-Chloro- 5-methylbenzeneboronic acid       TOXICITY       IRRITATION         Not Available       Not Available       Not Available         Legend:       1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.	Inhaled			
Skin Contact       using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable be used in an occupational setting.         Eye       This material can cause eye irritation and damage in some persons.         Chronic       Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Direusing animal models); nevertheless exposure by all routes should be minimised as a matter of course.         2-Chloro- 5-methylbenzeneboronic acid       TOXICITY       IRRITATION         Not Available       Not Available       Not Available	Ingestion	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.		
Chronic       Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Direusing animal models); nevertheless exposure by all routes should be minimised as a matter of course.         2-Chloro- 5-methylbenzeneboronic acid       TOXICITY       IRRITATION         Not Available       Not Available       Not Available         Legend:       1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.	Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.		
Chronic       using animal models); nevertheless exposure by all routes should be minimised as a matter of course.         2-Chloro- 5-methylbenzeneboronic acid       TOXICITY       IRRITATION         Not Available       Not Available       Not Available         Legend:       1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.	Eye	This material can cause eye irritation and damage in some persons.		
5-methylbenzeneboronic acid     I OAICH Y     I RATIATION       Not Available     Not Available     Not Available       Legend:     1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.	Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.		
5-methylbenzeneboronic acid     I OAICH Y     I RATIATION       Not Available     Not Available     Not Available       Legend:     1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.				
acid     Not Available     Not Available       Legend:     1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.		ΤΟΧΙΟΙΤΥ	IRRITATION	
	•	Not Available	Not Available	
- ····································	Legend:	<ol> <li>Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances</li> </ol>		

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	¥	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	*
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

Legend: X − Data either not available or does not fill the criteria for classification ✓ − Data available to make classification

# 11.2.1. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

# 11.2.2. Other information

See Section 11.1

# **SECTION 12 Ecological information**

# 12.1. Toxicity

2-Chloro- 5-methylbenzeneboronic acid	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

### 12.2. Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

### 12.3. Bioaccumulative potential

Ingredient E	Bioaccumulation	
Ν	No Data available for all ingredients	

# 12.4. Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

# 12.5. Results of PBT and vPvB assessment

	Р	В	т	
Relevant available data	Not Available	Not Available	Not Available	
PBT	×	×	×	
vPvB	×	×	×	
PBT Criteria fulfilled?	PBT Criteria fulfilled?			
vPvB	No			

## 12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties were found in the current literature.

# 12.7. Other adverse effects

No evidence of ozone depleting properties were found in the current literature.

# **SECTION 13 Disposal considerations**

# 13.1. Waste treatment methods

Product / Packaging disposal	<ul> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Bury residue in an authorised landfill.</li> <li>Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul>
Waste treatment options	Not Available
Sewage disposal options	Not Available

# **SECTION 14 Transport information**

### Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

# Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number or ID number	Not Applicable			
14.2. UN proper shipping name	Not Applicable			
14.3. Transport hazard class(es)		Not Applicab		
14.4. Packing group	Not Applicable			
14.5. Environmental hazard	Not Applicable			
	Hazard identificati	ion (Kemler)	Not Applicable	
14.6. Special precautions for user	Classification code		Not Applicable	
	Hazard Label		Not Applicable	
	Special provisions		Not Applicable	
	Limited quantity		Not Applicable	
	Tunnel Restriction	Code	Not Applicable	

# Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable			
14.2. UN proper shipping name	Not Applicable			
14.3. Transport hazard class(es)	ICAO/IATA Class	Not Applicable		
	ICAO / IATA Subrisk Not Applicable			
	ERG Code Not Applicable			
14.4. Packing group	Not Applicable			
14.5. Environmental hazard	Not Applicable			
14.6. Special precautions for user	Special provisions		Not Applicable	
	Cargo Only Packing Ir	nstructions	Not Applicable	
	Cargo Only Maximum Qty / Pack		Not Applicable	
	Passenger and Cargo Packing Instructions		Not Applicable	
	Passenger and Cargo Maximum Qty / Pack		Not Applicable	
	Passenger and Cargo Limited Quantity Packing Instructions		Not Applicable	
	Passenger and Cargo Limited Maximum Qty / Pack		Not Applicable	

# Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	IMDG Class     Not Applicable       IMDG Subrisk     Not Applicable	
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	

	EMS Number	Not Applicable
14.6. Special precautions for user	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

# Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	Not Applicable Not A	Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
	Classification code	Not Applicable
14.6. Special precautions for user	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

### 14.7. Maritime transport in bulk according to IMO instruments

### 14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

### 14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

|--|

# 14.7.3. Transport in bulk in accordance with the IGC Code

Product name	Ship Type

# **SECTION 15 Regulatory information**

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

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

#### Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

### 15.2. Chemical safety assessment

For further information please look at the Chemical Safety Assessment and Exposure Scenarios prepared by your Supply Chain if available.

#### ECHA SUMMARY

Not Applicable

### **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Not Available
Canada - DSL	Not Available
Canada - NDSL	Not Available
China - IECSC	Not Available
Europe - EINEC / ELINCS / NLP	Not Available
Japan - ENCS	Not Available

National Inventory	Status
Korea - KECI	Not Available
New Zealand - NZIoC	Not Available
Philippines - PICCS	Not Available
USA - TSCA	Not Available
Taiwan - TCSI	Not Available
Mexico - INSQ	Not Available
Vietnam - NCI	Not Available
Russia - FBEPH	Not Available
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

# **SECTION 16 Other information**

Revision Date	18/05/2022
Initial Date	18/05/2022

### Full text Risk and Hazard codes

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

EN 166 Personal eye-protection

EN 340 Protective clothing

- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

### **Definitions and abbreviations**

- PC TWA: Permissible Concentration-Time Weighted Average
- PC STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit.
- IDLH: Immediately Dangerous to Life or Health Concentrations
- ES: Exposure Standard
- OSF: Odour Safety Factor
- NOAEL :No Observed Adverse Effect Level
- LOAEL: Lowest Observed Adverse Effect Level
- TLV: Threshold Limit Value
- LOD: Limit Of Detection
- OTV: Odour Threshold Value BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European INventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Powered by AuthorITe, from Chemwatch.