

Infosafe No™ 3CHG7 Issue Date : October 2018 RE-ISSUED by ACR

Product Name : **BORIC ACID 4% w/v**

Classified as hazardous

## 1. Identification

**GHS Product Identifier** BORIC ACID 4% w/v  
**Product Code** 0426  
**Company Name** AUSTRALIAN CHEMICAL REAGENTS (ACR) (ABN 19 008 264 211)  
**Address** 38 - 50 Bedford Street Gillman  
 S.A. 5013 Australia  
**Telephone/Fax Number** Tel: (08) 8440 2000  
 Fax: (08) 8440 2001  
**(24 hour a day available)** CHEMCALL: 1800 127 406 (Australia) / +64-4-917-9888 (International)  
**Recommended use of the chemical and restrictions on use** Analytical reagent.  
**Other Information** EMERGENCY CONTACT NUMBER: +61 08 8440 2000  
 Business hours: 8:30am to 5:00pm, Monday to Friday.

Australian Chemical Reagents (ACR) does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Australian Chemical Reagents (ACR) with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Australian Chemical Reagents (ACR) is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

## 2. Hazard Identification

**GHS classification of the substance/mixture** Toxic to Reproduction: Category 2  
**Signal Word (s)** DANGER  
**Hazard Statement (s)** H360 May damage fertility. May damage the unborn child.  
**Pictogram (s)** Health hazard



**Precautionary statement – Prevention** P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P281 Use personal protective equipment as required.  
**Precautionary statement – Response** P308+P313 IF exposed or concerned: Get medical advice/attention.  
**Precautionary statement – Storage** P405 Store locked up.  
**Precautionary statement – Disposal** P501 Dispose of contents/container to an approved waste disposal plant.

## 3. Composition/information on ingredients

**Chemical Characterization** Liquid

| Ingredients | Name | CAS | Proportion | Hazard Symbol | Risk Phrase |
|-------------|------|-----|------------|---------------|-------------|
|-------------|------|-----|------------|---------------|-------------|

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| Boric acid                    | 10043-35-3 | 4 % |
| Water to make a total of 100% | 7732-18-5  | -   |

#### 4. First-aid measures

|                             |                                                                                                                                                                                                                     |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>           | Remove victim to fresh air. Seek medical advice if effects persist.                                                                                                                                                 |
| <b>Ingestion</b>            | Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.                                                |
| <b>Skin</b>                 | Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity. |
| <b>Eye contact</b>          | Irrigate with copious quantity of water for 15 minutes. Seek medical assistance if symptoms persist.                                                                                                                |
| <b>First Aid Facilities</b> | Maintain eyewash fountain and safety shower in work area.                                                                                                                                                           |
| <b>Advice to Doctor</b>     | Treat symptomatically based on judgement of doctor and individual reactions of the patient.                                                                                                                         |
| <b>Other Information</b>    | For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.                                                                                       |

#### 5. Fire-fighting measures

|                                                   |                                                                                                                                                                                                    |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific Methods</b>                           | This product contains a substantial proportion of water therefore there are no restrictions on the type of extinguishing media which may be used.<br>Water mist, foam, carbon dioxide, dry powder. |
| <b>Specific hazards arising from the chemical</b> | Material does not burn.                                                                                                                                                                            |
| <b>Precautions in connection with Fire</b>        | Use suitable protective equipment for surrounding fire.                                                                                                                                            |

#### 6. Accidental release measures

|                                           |                                                                                       |
|-------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>               | Avoid inhalation, contact with skin, eyes and clothing.                               |
| <b>Personal Protection</b>                | Wear protective clothing specified for normal operations (see Section 8)              |
| <b>Clean-up Methods - Small Spillages</b> | Do not use rags, sawdust or other combustible absorbents to wipe up spilled material. |
| <b>Environmental Precautions</b>          | Prevent from entering into drains, ditches, rivers or the sea.                        |

#### 7. Handling and storage

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for Safe Handling</b>                                | It is recommended that pregnant or breastfeeding women should not handle this product unless adequate exposure protection can be assured at all times. Female personnel planning pregnancy should be made aware of the potential risks. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before reuse. |
| <b>Conditions for safe storage, including any incompatibilities</b> | No special storage requirements. Keep only in original container.                                                                                                                                                                                                                                                                                                    |

#### 8. Exposure controls/personal protection

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Other Exposure Information</b>       | A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Safe Work Australia Australia for this product. There is a blanket limit of 10 mg/m3 for dusts or mists when limits have not otherwise been established.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Appropriate engineering controls</b> | In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Respiratory Protection</b>           | Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection. |

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| <b>Eye Protection</b>                | The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.                                                                                                                                            |
| <b>Hand Protection</b>               | Rubber or plastic gloves recommended.<br>Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.                                                                                                                                                                                                  |
| <b>Personal Protective Equipment</b> | Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards. |
| <b>Body Protection</b>               | Wear suitable protective clothing to prevent skin contact. Clean clothing or protective clothing should be worn. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.                                                                                                             |
| <b>Hygiene Measures</b>              | Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.                                                                                                                                                                                                    |

## 9. Physical and chemical properties

|                            |                                             |
|----------------------------|---------------------------------------------|
| <b>Form</b>                | Liquid                                      |
| <b>Appearance</b>          | Clear liquid.                               |
| <b>Odour</b>               | Odourless.                                  |
| <b>Solubility in Water</b> | Completely miscible                         |
| <b>pH</b>                  | ~ 5.1 (1.8g/l, 25 °C) Boric acid anhydrous. |
| <b>Flammability</b>        | Non combustible material.                   |

## 10. Stability and reactivity

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| <b>Chemical Stability</b>       | Stable under normal use conditons.           |
| <b>Conditions to Avoid</b>      | Extremes of temperature and direct sunlight. |
| <b>Hazardous Polymerization</b> | Will not occur.                              |

## 11. Toxicological Information

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Acute Toxicity - Oral</b>   | LD50 (rat): 2660 mg/kg - Boric acid anhydrous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Acute Toxicity - Dermal</b> | LD50 (rat): >2000 mg/kg - Boric acid anhydrous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Ingestion</b>               | May be harmful if swallowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Inhalation</b>              | May harmful if inhaled. Inhalation of vapours may irritate nose and throat                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Skin</b>                    | May be harmful if absorbed through skin. May irritate skin tissue with prolonged contact.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Eye</b>                     | May be irritating to eye tissue.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Carcinogenicity</b>         | No evidence of carcinogenic properties.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Reproductive Toxicity</b>   | This chemical is classified as hazardous for reproductive and developmental toxicity—Category 1B; H360FD (May damage fertility. May damage the unborn child) in the HCIS (Safe Work Australia).                                                                                                                                                                                                                                                                                                                                                     |
| <b>Chronic Effects</b>         | Ingestion or absorption may cause nausea, diarrhea, abdominal cramps, erythematous lesions on skin and mucous membranes, circulatory collapse, tachycardia, cyanosis, delirium, convulsions and coma. Death has occurred from <5 g in infants and from 5 to 20 g in adults. Prolonged absorption can result in anorexia, weight loss, gastrointestinal irritation, vomiting, mild diarrhoea, skin rash, alopecia, convulsions and anaemia. May cause kidney damage.<br>Chronic use may cause borism - dry skin, eruptions and gastric disturbances. |
| <b>Mutagenicity</b>            | No evidence of mutagenic effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Other Information</b>       | Substance should NOT be handled by pregnant staff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

## 12. Ecological information

|                                          |                                                                                                             |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Information on Ecological Effects</b> | No ecological problems are to be expected when the product is handled and used with due care and attention. |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------|

## 13. Disposal considerations

|                                |                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal Considerations</b> | Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and disposed of according to relevant local, state and federal government regulations. |
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## 14. Transport information

|                              |                                                                                                                            |
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| <b>Transport Information</b> | Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------|

## 15. Regulatory information

|                               |                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Regulatory Information</b> | All of the significant ingredients in this formulation are compliant with NICNAS regulations. |
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|                         |    |
|-------------------------|----|
| <b>Poisons Schedule</b> | S5 |
|-------------------------|----|

## 16. Other Information

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Literature References</b> | <p>'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.<br/>         Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997.<br/>         National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007.<br/>         Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', 2011.<br/>         Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 2010.<br/>         Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.<br/>         Safe Work Australia, 'Hazardous Substances Information System, 2005'.<br/>         Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances (2011)'.<br/>         Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995) 3rd Edition]'.</p> |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contact Person/Point</b> | <p>Paul McCarthy Ph. (08) 8440 2000 <b>DISCLAIMER STATEMENT:</b><br/>         All information provided in this data sheet or by our technical representatives is compiled from the best knowledge available to us. However, since data, safety standards and government regulations are subject to change and the conditions of handling and use, or misuse, are beyond our control, we make no warranty either expressed or implied, with respect to the completeness or accuracy to the information contained herein. Australian Chemical Reagents (ACR) accepts no responsibility whatsoever for its accuracy or for any results that may be obtained by customers from using the data and disclaims all liability for reliance on information provided in this data sheet or by our technical representatives.<br/>         ...End Of MSDS...</p> |
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