

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: BoreSaver Ultra C**

**Other names:** Oxalic acid (stabilized), Ethanedioic acid; Dicarboxylic acid.

**Supplier:** Aquabiotics Industrial Pty Ltd

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### 2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **NON-DANGEROUS GOODS.**

This material is hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE.**

**Classification of the substance or mixture:**

Acute Oral Toxicity - Category 4

Acute Dermal Toxicity - Category 4

Eye Damage - Category 1

**SIGNAL WORD: DANGER**



**Hazard Statement(s):**

H302+H312 Harmful if swallowed or in contact with skin.

H318 Causes serious eye damage.

**Precautionary Statement(s):**

**Prevention:**

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

**Response:**

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P363 Wash contaminated clothing before re-use.

P322 Specific measures (see First Aid Measures on Safety Data Sheet).

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 immediately call a POISON CENTER or doctor/physician.

**Disposal:**

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Oxalic acid (processed)	144-62-7	>90%	H312 H302
Stabilizers N.O.S.	NA	To 100%	NA

## 4. FIRST AID MEASURES

### Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

### Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

### Eye Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

### Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance. Indication of immediate medical attention and special treatment needed:  
Treat symptomatically. Can cause corneal burns.

## 5. FIRE FIGHTING MEASURES

**Flammable Properties:** During a fire, corrosive and toxic gases may be generated by thermal decomposition.

**Hazardous Combustion Products:** This material will not burn.

**Fire / Explosion Hazards:** May react violently with: strong bases strong oxidizers

**Static Discharge:** None reported.

**Mechanical Impact:** None reported

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear. Containers can build up pressure if exposed to high levels of heat.

## 6. ACCIDENTAL RELEASE MEASURES

### Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

### Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in dust. Sweep up, but avoid generating dust. Collect and seal in properly labeled containers or drums for disposal.

## 7. HANDLING AND STORAGE

**This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.**

### Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

Use of the substance/preparation: A cleaning agent to remove iron oxide from water bores, pumps, reticulation systems and other industrial water systems.

## 8. EXPOSURE CONTROLS / PROTECTIVE EQUIPMENT

Oxalic acid: 8hr TWA = 1 mg/m<sup>3</sup>, 15 min STEL = 2 mg/m<sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

#### Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. If inhalation risk exists: Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

#### Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

Orica Personal Protection Guide No. 1, 1998: F - OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. **NOTE: BoreSaver Ultra C is manufactured to present no dust hazard to users.**

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## 9. PHYSICAL / CHEMICAL PROPERTIES

**Appearance:** white unconsolidated crystalline solid mixture. Non-flammable, non-volatile.

**Physical state:** Granules or Crystals

**Colour:** White to Clear

**Odour:** Odourless

**Solubility:** Soluble in water, glycerol and alcohol. Partially soluble in ether. Insoluble in chloroform, petroleum ether and benzene.

**Specific Gravity:** 1.65 @20°C

**Relative Vapour Density (air=1):** Not available

**Vapour Pressure (20 °C):** <0.14 Pa

**Flash Point (°C):** Not applicable

**Flammability Limits (%):** Not available

**Autoignition Temperature (°C):** Not available

**Melting Point/Range (°C):** 101.5

**Decomposition Point (°C):** Not available

**pH:** 1.3 (0.1M when in solution) **Supplied product is NOT in solution.**

#### **Metal Corrosivity:**

**Steel:** Not determined

**Aluminum:** Not determined

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## 10. STABILITY / REACTIVITY

**Chemical Stability:** Stable when stored under proper conditions.

**Conditions to Avoid:** Heat

**Reactivity / Incompatibility:** Incompatible with: oxidizers alkalis. Dry oxalic acid is not corrosive to metals.

**Hazardous Decomposition:** Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.  
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Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

- Ingestion:** Swallowing can result in a severe burning pain of the mouth, throat and stomach followed by profuse vomiting (sometimes bloody). Small doses of oxalate in the body can cause headache, pain and twitching in muscles, and cramps. Larger doses can cause weak and irregular heartbeat, drop in blood pressure and signs of heart failure. Large doses rapidly cause a shock-like state, convulsions, coma and possibly death.
- Eye contact:** A severe eye irritant. Contamination of eyes can result in permanent injury.
- Skin contact:** Contact with skin may result in irritation. Solutions of 5% to 10% oxalic acid are irritating to the skin after prolonged exposure and can cause corrosive injury.
- Inhalation:** Breathing in dust may result in respiratory irritation. Inhaled oxalic acid is readily absorbed into the body and may cause headaches and nausea. Boresaver Ultra C is manufactured such that there is no dust hazard.
- Acute toxicity:**  
Oral LD50 (rat): 475 mg/kg  
Dermal LD50 (rabbit): 2000 mg/kg

**Chronic effects:** Long term exposure can result in kidney stones and stone formation in the urinary tract.

Exposure to this compound can result in systemic effects including kidney damage, muscle twitching, cramps and nervous system complaints.

This product does NOT contain any IARC listed chemicals.

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Avoid contaminating waterways in raw or concentrated state.

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## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:**

Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations.

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## 14. TRANSPORT INFORMATION

**Road and Rail Transport**

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

UN number: NA

UN proper shipping name: OXALIC ACID DIHYDRATE (STABILISED)

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## 15. REGULATORY INFORMATION

**Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

**Classification of the substance or mixture:**

Acute Oral Toxicity - Category 4

Acute Dermal Toxicity - Category 4

Eye Damage - Category 1

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**SDS Number:** 52010-16

Created February 4, 2014

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Updated February 7, 2014

## Hazard Statement(s):

H302+H312 Harmful if swallowed or in contact with skin.  
H318 Causes serious eye damage.

**Poisons Schedule (SUSMP):** S6 Poison.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

### **National Inventories:**

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use is exempted from registration according to Article 2 REACH regulation (EC) No 1907/2006, the annual tonnage doesn't not require registration or the registration is envisaged for a later registration deadline.

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## 16. OTHER INFORMATION

**References:** 29 CFR 1900 - 1910 (Code of Federal Regulations - Labor). Air Contaminants, Federal Register, Vol. 54, No. 12. Thursday, January 19, 1989. pp. 2332-2983. TLV's Threshold Limit Values and Biological Exposure Indices for 1992-1993. American Conference of Governmental Industrial Hygienists, 1992. CCINFO RTECS. Canadian Centre for Occupational Health and Safety. Hamilton, Ontario Canada: 30 June 1993. Sax, N. Irving. Dangerous Properties of Industrial Materials, 7th Ed. New York: Van Nostrand Reinhold Co., 1989. Vendor Information. The Merck Index, 11th Ed. Rahway, New Jersey: Merck and Co., Inc., 1989. Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Fire Protection Guide on Hazardous Materials, 10th Ed. Quincy, MA: National Fire Protection Association, 1991. Technical Judgment.

**Use of the substance/preparation:** A cleaning agent to remove iron oxide from water bores, pumps, reticulation systems and other industrial water systems.

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Supplier Safety Data Sheet; 03/ 2013.

This safety data sheet is based on one prepared by Orica Toxicology & SDS Services. Only section:1 contact information has been modified.

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Orica Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

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### **Legend:**

NA - Not Applicable w/w - weight/weight  
ND - Not Determined w/v - weight/volume  
NV - Not Available v/v - volume/volume

**USER RESPONSIBILITY:** Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

**THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE.**

**HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.**

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