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| Infosafe No™ | 1CH3I | Issue Date : January 2017 | RE-ISSUED by CHEMSUPP |
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Product Name : **ASCORBIC ACID**

Not classified as hazardous

1. Identification

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| GHS Product Identifier | ASCORBIC ACID | | |
| Company Name | CHEM-SUPPLY PTY LTD (ABN 19 008 264 211) | | |
| Address | 38 - 50 Bedford Street GILLMAN SA 5013 Australia | | |
| Telephone/Fax Number | Tel: (08) 8440-2000 Fax: (08) 8440-2001 | | |
| Recommended use of the chemical and restrictions on use | Nutrition, colour fixing, flavouring and preservative in meats and other foods, oxidant in bread doughs, abscission of citrus fruit in harvesting, reducing agent in analytical chemistry and laboratory reagent. | | |
| Other Names | Name | Product Code | |
| | ASCORBIC ACID AR | AA022 | |
| | ASCORBIC ACID LR | AL022 | |
| | ASCORBIC ACID BP | AP022 | |
| | L-Ascorbic acid | | |
| | Vitamin C | | |
| Other Information | EMERGENCY CONTACT NUMBER: +61 08 8440 2000 Business hours: 8:30am to 5:00pm, Monday to Friday. | | |

Chem-Supply Pty Ltd 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 Chem-Supply Pty Ltd 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 Chem-Supply Pty Ltd 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

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| GHS classification of the substance/mixture | Not classified as hazardous according to the Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004) 3rd Edition, Safe Work Australia. Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG). |
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3. Composition/information on ingredients

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|----------------------------------|------------------|------------|-------------------|----------------------|--------------------|
| Chemical Characterization | Solid | | | | |
| Ingredients | Name | CAS | Proportion | Hazard Symbol | Risk Phrase |
| | L-Ascorbic acid. | 50-81-7 | 100 % | | |

4. First-aid measures

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| Inhalation | Remove victim to fresh air. Seek medical advice if effects persist. If breathing has stopped, apply artificial respiration. |
| Ingestion | Rinse mouth thoroughly with water immediately. Give plenty of water to drink. Seek medical attention in severe cases, or if large amounts ingested. NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or is convulsing. Do not induce vomiting. |
| Skin | Wash with plenty of soap and water. If irritation occurs seek medical advice. Remove contaminated clothing Wash clothing before reuse. Seek medical attention. |
| Eye contact | Irrigate with copious quantity of water for 15 minutes. Seek medical assistance if symptoms persist. Remove contact lenses. |
| First Aid Facilities | Maintain eyewash fountain and drench facilities in work area. |
| Advice to Doctor | Treat symptomatically. Adverse effects on colour vision. Ascorbic acid should be given with care to patients with hyperoxaluria. |
| Other Information | For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor. |

5. Fire-fighting measures



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| Hazards from Combustion Products | Acrid smoke and irritating fumes, carbon monoxide and carbon dioxide. |
| Specific Methods | Small fire: Use dry chemical, CO ₂ , water spray or foam. Large fire: Use water spray, fog or foam. If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out. |
| Specific hazards arising from the chemical | May burn but do not ignite readily. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive fumes. Containers may explode when heated. |
| Decomposition Temp. | ca. 183 °C; 190 - 192 °C. |
| Precautions in connection with Fire | Wear SCBA and structural firefighter's uniform. |

6. Accidental release measures

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| Spills & Disposal | Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 15m. Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL. |
| Personal Precautions | Do not breathe dust. Do not breathe fumes, vapour, gas. Avoid inhalation, contact with skin, eyes and clothing. |

7. Handling and storage

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| Precautions for Safe Handling | Avoid ingestion and inhalation of vapours, or dusts. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Minimize dust generation and accumulation. Keep container tightly closed. Use with adequate ventilation. If ingested, seek medical advice immediately and show the container or the label. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Light sensitive. Protect against physical damage and light. Keep away from heat and all sources of ignition. Ground all equipment containing material. Keep away from incompatibles such as oxidizing agents and strong bases. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. |
| Conditions for safe storage, including any incompatibilities | Store in tightly closed containers, in a cool, dry, well-ventilated area away from incompatible substances. Separated from strong oxidants, strong bases. Solutions of ascorbic acid are rapidly oxidized in air and in alkaline media; the drug should be protected from air and light. Store in light-resistant containers. Store away from direct sunlight. Store protected from moisture. Store under an inert atmosphere. Protect against physical damage. Isolate from any source of heat or ignition. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. |
| Corrosiveness | Attacks aluminium, copper, copper alloys, iron and zinc. |
| Storage Temperatures | Store at room temperature (15 to 25 °C recommended). |
| Unsuitable Materials | Aluminium, copper, copper alloys, iron and zinc. |

8. Exposure controls/personal protection

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| Other Exposure Information | A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Safe Work Australia for this product. There is a blanket limit of 10 mg/m ³ for dusts when limits have not otherwise been established. |
| Appropriate engineering controls | 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. |
| Respiratory Protection | 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. |
| Eye Protection | The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. |



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| Hand Protection | Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336. Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance. Recommendation: Plastic or rubber gloves. |
| Body Protection | Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals. |
| Hygiene Measures | 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

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| Form | Solid |
| Appearance | White to a very pale yellow crystalline solid, or colourless crystals. |
| Odour | Odourless. |
| Decomposition Temperature | ca. 183 °C; 190 - 192 °C. |
| Melting Point | ca. 183 °C; 190 - 192 °C (decomposes). |
| Solubility in Water | Soluble (1g/3mL at 20 °C). |
| Solubility in Organic Solvents | Slightly soluble in alcohol, glycerol and propylene glycol. Insoluble in ether, chloroform, benzene, petroleum ether, oils and fats. |
| Specific Gravity | 1.65 - 1.70 |
| Solubility in Fat | Insoluble. |
| pH | 2.1 - 2.6 (5% aqueous solution) |
| Vapour Pressure | 7.9179 Pa @ 192 °C |
| Volatile Component | 0 %vol @ 21 °C |
| Partition Coefficient: n-octanol/water | log P (o/w): -2.15 |
| Flash Point | 99 °C |
| Flammability | Combustible. |
| Auto-Ignition Temperature | 640 °C |
| Flammable Limits - Lower | 10% by Volume (g.cu. ft.) |
| Flammable Limits - Upper | 20% by Volume (g.cu. ft.) |
| Explosion Properties | May form an explosive organic dust cloud with air. |
| Molecular Weight | 176.13 |
| Oxidising Properties | The substance is a strong reducing agent and reacts with oxidants. |
| Other Information | Taste: Pleasant, sharp acidic taste. |

10. Stability and reactivity

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| Chemical Stability | Stable at room temperature in closed containers under normal storage and handling conditions. Stable to air when dry; aqueous solutions are rapidly oxidized by air. |
| Conditions to Avoid | Heat, ignition sources, light, air, moisture, dust generation and incompatible materials. |
| Incompatible Materials | Strong oxidizing agents, alkalis, aluminium, iron, copper, copper alloys, zinc, metal ions, water, acids, sodium nitrate, alkali hydroxides, sodium salicylate, sodium nitrite, theobromine and methenamine. |
| Hazardous Decomposition Products | Carbon monoxide and carbon dioxide. |
| Possibility of hazardous reactions | Reactive with oxidizing agents. Air and light sensitive. Aqueous solutions are rapidly oxidized by air, accelerated by alkalis, iron, copper. |
| Hazardous Polymerization | Will not occur. |

11. Toxicological Information



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| Acute Toxicity - Oral | LD50 (rat): 11900 mg/kg; LD50 (mouse): 3367 mg/kg. |
| Ingestion | Ingestion of small amounts during normal industrial handling is a low hazard. Ingestion of large amounts may cause gastrointestinal irritation, gastrointestinal disturbances (nausea, vomiting and diarrhoea), hypermotility, acidification of the urine which may cause precipitation of cystine and oxalate stones in the urinary tract and may cause renal failure coordination, somnolence, eyes (lacrimation), blood (anaemia), a disruption of psychological functioning resulting in decreased reaction times and psychomotor coordination. Increases iron absorption and, thus, large doses may be dangerous in persons with haemochromatosis, thalassaemia, or sideroblastic anaemia. Persons with erythrocyte/G6PD deficiency may develop mild haemolysis. High doses taken during pregnancy may cause scurvy in infants when born. |
| Inhalation | Irritates the respiratory tract. May cause coughing and a sore throat. |
| Skin | May cause mild to moderate irritation and redness. When in solution forms a strong acid which may be irritating to skin. |
| Eye | May cause mild to moderate irritation, redness and pain. When in solution forms a strong acid which may be irritating to eyes. |
| Carcinogenicity | Not listed in the IARC Monographs. |
| Chronic Effects | Chronic ingestion of ascorbic acid can change the pH of the saliva so that calcium is lost from tooth enamel leading to dental enamel erosion. Prolonged or repeated ingestion may affect the blood/bone marrow and metabolism. Chronic ingestion of large doses may cause gastrointestinal disturbances including nausea and diarrhoea, urinary effects involving urine acidification, oxalate and uric crystallization in the bladder and kidney, and decreased reaction times and psychomotor coordination. Eye irritation test (rabbit): Slight irritation. |
| Serious eye damage/irritation | |
| Skin corrosion/irritation | Skin irritation test (rabbit): No irritation. |

12. Ecological information

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| Ecological Information | No ecological problems are to be expected when the product is handled and used with due care and attention. |
| Ecotoxicity | When introduced properly, no impairments in the function of waste-water-treatment plants are to be expected. |
| Persistence and degradability | Biologic degradation: Readily biodegradable. BOD 48 % of ThOD /5 d (closed bottle test); BOD 65 % of ThOD /28 d (closed bottle test). |
| Mobility | Distribution: log P(oct) -2.15. |
| Bioaccumulative Potential | No bioaccumulation is to be expected (log P(o/w) <1). |
| Acute Toxicity - Fish | Onchorhynchus mykiss LC50: 1020 mg/l /96 h acid; L.idus LC50: 33000 mg/l /48 h. |

13. Disposal considerations

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| Disposal Considerations | Dispose of according to relevant local, state and federal government regulations. |
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14. Transport information

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| Transport Information | Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. |
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15. Regulatory information

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| Poisons Schedule | Not Scheduled |
|-------------------------|---------------|

16. Other Information

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| Literature References | 'Standard for the Uniform Scheduling of Medicines and Poisons No. 15', Commonwealth of Australia, November 2016. Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley and Sons, Inc., NY, 1997. National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.', 2007. Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous |
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Safety Data Sheet

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**Contact
Person/Point**

Chemicals', 2011.
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide',
Standards Australia/Standards New Zealand, 2010.
Safe Work Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]'.
Safe Work Australia, 'Hazardous Substances Information System, 2005'.
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances
(2011)'.
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational
Environment [NOHSC:1003(1995) 3rd Edition]'.
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**Empirical Formula &
Structural Formula**

C6-H8-O6
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