

VETPAK SAFETY DATA SHEET

Section 1: Identification of the Substance or Mixture and of the Supplier

Product Name: **CITRIC ACID**

Recommended Use:

Company Details: Vetpak Ltd.

Address: 249 Bruce Berquist Dr, Te Awamutu 3800.

Telephone Number: (07) 870 2024

Emergency Telephone Number: (0800) 764-766 24 hours National Poisons Centre, Department of Preventative and Social Medicine, University of Otago, P O Box 913, Dunedin, New Zealand.
(07) 870 2024 Vetpak. 8.00am to 5.00pm Monday to Friday except public holidays

Date of Review: 15th July 2019

Section 2: Hazards Identification

STATEMENT OF HAZARDOUS NATURE

This product is **HAZARDOUS IN THIS FORM AND AT THIS STRENGTH.**

Handle correctly and as directed by this SDS.

HAZARD LABELLING WARNING



HAZARD CLASSIFICATION AND STATEMENTS

HSNO	HSNO	GHS	Signal Word	GHS Hazard Statement
6.1E	Acutely Toxic	Category 5	Warning	H303 May be harmful if swallowed
6.3B	Mildly irritating to the skin	Category 3	Warning	H316 Causes mild skin irritation
8.3A	Corrosive to ocular tissue	Category 1	Danger	H318 Causes serious eye damage

GHS Prevention Statements

P102: Keep out of reach of children

P103: Read label before use

P280: Wear protective gloves/clothing and eye/face protection

Section 3: Composition / Information on Ingredients:

COMPOSITION

Ingredient	CAS Number	% w/w	HAZARDOUS
Citric Acid	77-92-9	>99	Yes 6.1E; 6.3B; 8.3A
Water	7732-18-5	<1	No

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Section 4: First Aid Measures:

Description of necessary first Aid measures:

Swallowed: If swallowed, rinse out mouth and then drink 1 - 3 cups of water. DO NOT induce vomiting. Seek medical attention if necessary.

Skin: Remove contaminated clothing, wash affected skin with soap and water - DO NOT use any solvents.

Eye: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and safe to do. Continue rinsing. Immediately call a Poison centre or doctor.

Inhaled: Remove casualty to fresh air and keep him/her calm. Consult physician.

Workplace Facilities: Eye bath and running water.

Notes for Medical Personnel: Treat symptomatically based on judgment of doctor and individual reactions of patient.

Section 5: Fire Fighting Measures

Fire Hazard Properties: Decomposes when exposed to fire conditions. Products of decomposition may include oxides of carbon, acrid smoke, and irritating fumes. Dust may form explosive mixture with air.

Extinguishing Media & Methods: Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray jet, dry powder, foam, or carbon dioxide as extinguishing media. Precipitate gases/vapours/mists with water spray.

Recommended Protective Clothing: No data available.

Section 6: Accidental Release Methods

Procedures to be covered: Clean up personnel should wear full protective clothing including respiratory protection in dusty conditions. Avoid raising dust. Collect spilled material into suitable containers and hold for later disposal. Flush away spill area residues with copious amounts of water.

Section 7: Handling and Storage

Storage: Store in closed, labeled containers and in a dry place, with the lid firmly fastened. Store at temperatures between 10 - 25 deg C. Keep away from aluminium, copper, zinc, and steel. Keep away from potassium tartrate, alkalis, alkaline earth carbonates and bicarbonates, metal nitrates, acetates, and sulfides.

Packaging: Use glass, stainless steel, polyethylene, polypropylene, or PVC. Do not use aluminium, copper, zinc and steel.

Section 8: Exposure Controls / Personal Protection

Workplace Exposure Standards: An exposure standard has not been established for this product.

Engineering Controls: Transfer and handle only in enclosed systems. Local exhaust ventilation is necessary. Take precautionary measures against electrostatic charging. Avoid dust formation - consider dust explosion hazard.

Personal Protective Equipment (PPE): Use protective gloves, dust mask, tightly fitting safety glasses, overalls and boots.



General hygiene: Do not eat, drink or smoke while handling. Wash hands thoroughly after handling.

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Section 9: Physical and Chemical Properties

Appearance (physical state, colour etc.): Colourless to white, slightly hygroscopic, powder.

Odour: Odourless (strong acidic taste)

pH: 2.2 (10g/l @ 20 deg C)

Melting Point/Freezing Point (°C): 153

Boiling Point (°C):

Flash Point (°C):

Flammability:

Lower Flammability/Explosive Limit:

Upper Flammability/Explosive Limit:

Auto-ignition Temperature (°C): 500

Vapour Pressure:

Vapour Density:

Relative Density:

Solubility in Water: 1.47 g/g water or 59.2g/100g citric acid solution

Specific Gravity: 1.542 (water = 1)

Viscosity:

Section 10: Stability and Reactivity

Stability of the Substance: Stable under normal conditions of storage.

Conditions to avoid: No information available.

Material to avoid: Keep away from aluminium, copper, zinc, and steel. Keep away from potassium tartrate, alkalis, alkaline earth carbonates and bicarbonates, metal nitrates, acetates, and sulfides.

Hazardous decomposition Products: No information available.

Hazardous polymerization: No information available.

Section 11: Toxicological Information

Data and interpretation:

Acute Effects:

Swallowed: Adverse effects are not expected.

Oral (rabbit) LD50: >7000 mg/kg.

Oral (mouse) LD50: >5400 mg/kg.

Oral (rat) LD50: >6730 mg/kg.

Skin: Irritating to eyes.

Skin - moderate irritant (rabbit): 500 mg/24hr.

Eye: Contact with skin may result in moderate irritation.

Eye - strong irritant (rabbit): 750 ug/24hr.

Inhaled: Inhalation of dust or powder is likely to result in respiratory irritation.

Chronic Effects:

Chronic Toxicity: None expected (well tolerated oral (rat): 2000 mg/kg/90 days)

Carcinogenic Effects: None

Mutagenic Effects: None

Developmental Effects: None

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Section 12: Ecological Information

Potential Environmental Considerations: None. Prevent entry to drains and waterways as good practice.

Ecotoxicity in water: None

Products of Degradation:

Section 13: Disposal Considerations

Disposal Information: Dispose according to all local government regulations. Bury, incinerate or cover contaminated surface with soda ash or sodium bicarbonate. Neutralize with NH₄OH or HCL.

Section 14: Transport Information

Hazard Class: 6.1E; 6.3B; 8.3A

UN-No:

Packing Group:

Hazchem Code:

Proper Shipping Name: CITRIC ACID ANHYDROUS

Segregation:

Marine:

Air Transport:

Section 15: Regulatory Information

HSNO Approval Number: N/A

Regulatory status: No special regulatory status. Appears on the GRAS (Generally Regarded As Safe) list. Ministry for Primary Industries.

Section 16: Other Information

Interpretation and Abbreviations

Controls applying to a substance:

- * denotes that changes have been made to these controls, further information on these changes is located in the transfer notice for that substance,
- (R) abbreviation for the term Regulation of the Hazardous Substances regulations

AICS – Australian Inventory of Chemical Substances

AOX – Absorbable organic halogens.

APF – Assigned Protection Factor.

BOD – Biochemical Oxygen Demand China

COD – Chemical Oxygen Demand

DSL – Canadian Domestic Substances List.

EINECS – European Inventory of Existing Commercial Chemical Substances.

ENCS – Japanese Existing and New Chemical substances.

IARC – International Agency for Research on Cancer.

IDLH – Immediately Dangerous to Life or Health Concentrations.

ISHL – Japanese Industrial Safety and Health Law List of Chemicals.

LOEL – Lowest Observed Effect Level.

LC⁵⁰ – Lethal concentration sufficient to kill 50 percent of the test population within a certain time

LD⁵⁰ – Lethal Dose sufficient to kill 50 percent of the test population within a certain time

LD_{Lo} – Lethal Dose Low (the lowest dosage per unit of bodyweight of a substance known to have resulted in fatality in a particular animal species).

Citric Acid,

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MAK – Maximum workplace concentration in the workplace air that generally does not have known adverse effects on the health of the employee nor cause unreasonable annoyance when a person is repeatedly exposed during long periods, usually 8 hours daily, 40hour working week).

NOAA – National Oceanic and Atmospheric Administration.

NOEC – No Observed Effect Concentration.

NTP – National Toxicology Program.

NZIoC – New Zealand Inventory of Chemicals.

OECD HPV – The Organisation for Economic Co-operation and Development High Product Volume Chemicals.

PEL – Permissible exposure limit.

PPE – Personal Protective Equipment.

Prop 65 – California Proposition 65 List of Chemicals.

RTECS – Registry of Toxic Effects of Chemical substances

STEL – Short term exposure limit.

TC^{LO} – Toxic concentration low (the lowest concentration of a substance known to have resulted in fatality in a particular animal species)

TOC – Total Organic Carbon.

TSCA – US Toxic Substances Control Act Existing Chemicals.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

VOC – Volatile Organic Compounds.

Date of Preparation/Review: 15 July 2019

Sources of key data used to compile the datasheet:

Manufacturers SDS

NZ EPA CCID

Health and Safety at Work (Hazardous Substances) Regulations 2017

Hazardous Substances (Safety Data Sheets Notice 2017

Hazardous Substances (Classification) Notice 2017

Labelling of Hazardous Substances Technical Guide 2012

DISCLAIMER

The information contained in this safety data sheet was obtained from current and reliable sources.

This data is supplied without warranty, expressed or implied, regarding its correctness and accuracy.

It is the user's responsibility to determine safe conditions for use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.

END OF SDS