

**SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING**
**PRODUCT IDENTIFIER**

Product Name	Ascorbic Acid
Other Names	Vitamin C; L-Ascorbic acid
CAS Number	50-81-7 / 62624-30-0

**DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET**

Registered distributor company name	Pure Ingredients Ltd	Pure Nature
Address	626A Rosebank Road, Avondale 1026	626A Rosebank Road, Avondale 1026
Telephone	+64 9 813 5619	+64 813 9412
Website	www.pureingredients.co.nz	www.purenature.co.nz
Email	compliance@pureingredients.co.nz	info@purenature.co.nz

**EMERGENCY TELEPHONE NUMBER**

Association / Organisation	0800 CHEMCALL / 0800 243 622 (24hr)
Emergency telephone numbers	111
Other emergency telephone numbers	0800 764 766

**SECTION 2 HAZARDS IDENTIFICATION**

HSNO Hazard Classification	Not classified
HSNO Approval Number	-
Hazard Nature	This product is not classified as hazardous under HSNO criteria
Pictogram(s)	Nil
Signal Word	Nil
Hazard Statement(s)	Nil
Prevention Statement(s)	Avoid generating excessive dust. Do not breathe dust.
Response Statement(s)	If in contact with eyes, rinse thoroughly.
Storage Statement(s)	Nil
Disposal Statement(s)	Nil

**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

CAS No.	% [weight/volume]	INCI Name
50-81-7 / 62624-30-0	>99 %	Ascorbic Acid

**SECTION 4 FIRST AID MEASURES**

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Main symptoms caused by exposure	May cause mild irritation to skin and eyes.
Swallowed	Rinse mouth. Give a glass of water to drink. First aid is not generally required. If unwell or in doubt, contact the Poison Centre or a doctor.
Eye	Wash out immediately with fresh running water. 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. If pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin	If skin or hair contact occurs flush skin and hair with running water (and soap if available). Seek medical attention in the event of irritation.
Inhaled	Remove to fresh air. Encourage patient to blow nose to ensure clear passage of breathing. Other measures are usually unnecessary. If symptoms persist, call a doctor.

**SECTION 5 FIREFIGHTING MEASURES**

Extinguishing material	Use appropriate extinguishing media most suitable for surrounding fire conditions: water spray, dry powder, foam, CO <sub>2</sub> .
Fire fighting	Alert Fire Brigade and tell them location and nature of hazard. Use standard procedure for chemical fires. Clear fire area of all non-emergency personnel. Stay upwind. Eliminate ignition sources. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use.
Fire/explosion hazard	Combustible. Burns at high temperatures. Avoid generating dust, particularly clouds of dust in a confined or unventilated space. Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.
Hazards from combustion products	Combustion products include carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ), other pyrolysis products typical of burning organic material. May emit clouds of acrid smoke.
Personal protective equipment	Firefighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots and gloves).

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Spill response	Avoid generating dust. Increase ventilation. Move upwind. Evacuate all unnecessary personnel. Eliminate all sources of ignition. Personnel involved in the clean-up should wear full protective clothing. Stop leak if safe to do so. Use spark-proof tools and equipment. Sweep up or vacuum up (consider explosion-proof machines designed to be grounded during use). Collect in a labelled chemical waste container and seal for disposal. Do NOT let product reach drains or waterways. If a significant amount does enter a waterway advise your local waste authority. Wash spill area with plenty of water after removal of contaminant.
----------------	--

**SECTION 7 HANDLING AND STORAGE**

Procedure for handling	Operators should be trained in procedures for safe use of this material. Use good occupational work practice. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid dust formation and breathing dust. Avoid contact with skin and eyes. Avoid contact with incompatible materials. Avoid all ignition sources. Avoid sources of heat. Handle and open container with care. Use in a well-ventilated area. Always wash hands with soap and water after handling or if accidental exposure occurs. Work clothes should be laundered separately. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices.
Suitable packaging	Store in original packaging. Food grade cardboard carton with polyethylene liner. Glass container, Plastic container. Multi-ply woven plastic or paper bag with sealed plastic liner.
Storage incompatibility	Avoid contamination, store away from Dangerous Goods and Toxic Substances. Incompatible with strong oxidizing agents and strong alkalis.
Storage requirements	Store in dry, cool, well ventilated conditions out of direct sunlight. Keep containers tightly sealed to protect the product from air and light as the product may oxidise when exposed. Protect containers against physical damage and check regularly for leaks.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

Exposure controls	Source	Material	Measurement	Limit
	New Zealand WES 2020	total dust	time weighted average (TWA)	10 mg/m <sup>3</sup>
	New Zealand WES 2020	respirable dust	time weighted average (TWA)	3 mg/m <sup>3</sup>
No exposure limits set by WorkSafe New Zealand or Safe Work Australia.				
Ventilation system	Remove dust as necessary. Refer to the 'Local exhaust ventilation' guide found on the WorkSafe New Zealand website.			
Personal Protection Equipment (PPE)				
Personal respirators	An approved dust mask e.g., a P1 respirator is recommended when using this product in dusty conditions. See Australian/New Zealand Standard, AS/NZS 1715:2009 and AS/NZS 1716:2012.			
Skin protection	Wear impervious protective clothing, including covered shoes, nitrile rubber gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.			
Eye protection	Use chemical safety glasses with side shields to protect eyes from exposure. Maintain eye wash fountain and quick-drench facilities in work area.			

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	White crystalline powder	Solubility in water (20°C)	333 g/L
State	Divided solid	pH (2% solution)	2.4 – 2.8
Odour	Not available	Bulk Density	~1.7 g/cm <sup>3</sup>
Molecular Weight	176.14	Autoignition Temp	660°C
Melting Range	190°C (decomposes)	Decomposition Temp	190°C

**SECTION 10 STABILITY AND REACTIVITY**

Chemical stability	Product is stable under normal conditions of use, storage and temperature.
Conditions to avoid	Avoid exposure to air as the product oxidises on exposure to air and light. Avoid dusting conditions, all light sources, moisture, and temperature extremes. Keep containers dry and tightly closed to avoid moisture absorption and contamination.
Incompatible materials	Incompatible with strong oxidizing agents and strong bases.
Hazardous decomposition products	Thermal decomposition can lead to release of carbon monoxide and carbon dioxide.
Hazardous reactions	Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

Health Effects	
Swallowed	The material may be regarded as non-irritating and non-toxic. Small amounts or low dose rates are regarded as practically non-harmful. Large doses may cause diarrhoea.
Eye	The dust is discomforting to the eyes and is capable of causing a mild, temporary redness of the conjunctiva, temporary impairment of vision and other transient eye damage/ ulceration.
Skin	The material may be slightly discomforting to the skin.
Inhaled	The dust may be discomforting to the upper respiratory tract.
Chronic Health Effects	Prolonged high doses of Vitamin C are associated with formation of kidney stones in some persons.
Toxicology and Irritation Data	
Toxicity	Acute Oral Toxicity, Rat, LD50: >5000 mg/kg Acute Dermal Toxicity, LD50: No data available. Acute Inhalation Toxicity, LC50: No data available.
Irritation/corrosion	Skin: Mild irritation – not classified Eyes: Mild irritation – not classified
Carcinogenic effects	Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
Mutagenic effects	No data available.
Reproductive or developmental effects	No data available.
Aspiration hazard	No data available.
Specific target organ toxicity	No data available.
Sensitisation (respiratory/contact)	No data available.

**SECTION 12 ECOLOGICAL INFORMATION**

Ecotoxicity	Not considered to be a hazard in the environment. Fish, ( <i>Oncorhynchus mykiss</i> ), 96h LC <sub>50</sub> : 1020 mg/L Crustacean, 48h EC <sub>50</sub> : No data available. Algae, 96h EC <sub>50</sub> : No data available.
Persistence & Degradability	No data available.
Mobility	No data available.
Bioaccumulation	Not expected to bioaccumulate.
BOD and COD	No data available.
Products of Biodegradation	No data available.
Toxicity of the Products of Biodegradation	No data available.
DO NOT discharge into sewer or waterways.	

**SECTION 13 DISPOSAL CONSIDERATION**

Recycle wherever possible. Consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: Burial in a licensed landfill or incineration in a licensed apparatus (after admixture with suitable combustible material). Empty contaminated packaging should be taken for local recycling, recovery or waste disposal.

**SECTION 14 TRANSPORT INFORMATION**

Transport	Road & Rail	Marine	Air
UN number	Not dangerous goods.	Not dangerous goods.	Not dangerous goods.
UN proper shipping name	Nil	Nil	Nil
Transport hazard class(es)	Nil	Nil	Nil
Packing group	Nil	Nil	Nil
Environmental hazards	Nil	Nil	Nil

**SECTION 15 REGULATORY INFORMATION**

Non-hazardous.

Controls applying to this substance are: None, not hazardous.

Ascorbic acid (CAS 50-81-7) is found on the following inventories: NZIoC, AIIC, TSCA, DSL, EINECS

**SECTION 16 OTHER INFORMATION**

The information contained in this Safety Data Sheet is obtained from current and reliable sources. Pure Ingredients Ltd provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This Safety Data Sheet summarises our best current knowledge of the health and safety hazard information of the product but does not claim to be all inclusive. This document is intended only as a guide to the appropriate handling of this material.

Reference: supplier's SDS.

Version: 00 Date of Preparation/Review: 2018.01.19

Version: 01 Revision Date: 20/01/2022: PIL – SA082 02082021