

SAFETY DATA SHEET (SDS)

Version 2.0

Revision Date : April 25, 2022

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Vitamin C
Synonyms	:	Ascorbic acid
INCI name	:	Ascorbic acid
CAS #	:	50-81-7
Country of Origin	:	China
EINECS #	:	200-066-2
Product use	:	Domestic and Industrial
Supplier	:	New Directions Aromatics Inc.
Address	:	6781 Columbus Road, Mississauga, Ontario, CANADA L5T 2G9
Fax	:	905-362-1926
Telephone number	:	905-362-1915
Emergency phone number	:	(613)-996-6666 CANUTEC 24 HOUR EMERGENCY

2. HAZARDS IDENTIFICATION

Emergency Overview

GHS Classification

Combustible dusts - Category 1

GHS Label elements, including precautionary statements

Signal: Warning

Hazard statement(s)

Not available. May form combustible dust concentrations in air.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
P233	Keep container tightly closed. May form explosive dust-air mixture if dispersed.

3. COMPOSITION / INFORMATION INGREDIENTS

Product Name	CAS NO	EC NO	Concentration
Ascorbic acid (L-)	50-81-7	200-066-2	100 %

4. FIRST AID MEASURES

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Skin contact

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Inhalation

DO NOT induce vomiting unless directed to do so by a medical personnel. Seek medical attention or contact local poison control center.

Ingestion

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Foam. Dry Powder. Carbon dioxide.

Unsuitable extinguishing media

Avoid high pressure media which could cause the formation of a potentially explosive dust-air mixture.

Special protective equipment and precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Wear proper protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Exercise caution when fighting any chemical fire.

Special hazards arising from the substance or its combustible products

May form explosive dust-air mixture if dispersed.

Resulting gases

Carbon dioxide, carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. DO NOT touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or

sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basement or confined areas. Vacuum or sweep up material and place in a designated labeled waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

No direct lighting. No smoking. Ensure prompt removal from eyes, skin and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety procedures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drinks. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully released and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of the environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin

If skin contact or contamination of clothing is likely, protective clothing should be worn. Use protective gloves.

Respiratory

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training and other important aspects of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	White, crystalline powder
Odor	:	Slight odor.
pH	:	2.1 to 2.6 @ 5%, W/V
Melting Point/Freezing Point	:	Decomposition Temperature: 190 °C to 192 °C
Relative density	:	1.65 g/cm ³
Solubility (ies)	:	Soluble in water.
Partition coefficient	:	-1.85
Auto-ignition temperature	:	660°C (1220°F)
Decomposition temperature	:	190°C (374°F)
Optical rotation	:	+20.5° to +21.5°

10. STABILITY AND REACTIVITY

Reactivity

This material presents no significant reactivity hazard.

Chemical stability

Chemically stable.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. Prevent dust accumulation.

Incompatible materials

Oxidizing materials: metals, alkalis.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity (LD50): 11900 mg/kg [Rat]

Respiratory or skin sensitization

May cause respiratory irritation.

Inhalation

Inhalation of high concentrations of vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.

Skin contact

Adverse skin effects should be prevented by normal care and personal hygiene.

Eye contact

Possible irritation should be prevented by wearing safety glasses.

Repeated exposure

Repeated or prolonged contact may cause redness, irritation and scaling of skin (Dermatitis).

12. ECOLOGICAL INFORMATION

Ecotoxicity

Avoid any pollution of ground, surface or underground water.

Persistence and degradability

Not available.

Bio - accumulative potential

Low potential.

Mobility in soil

Not available.

Other adverse effects

Not available.

13. DISPOSAL CONSIDERATION

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection

and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

US DOT Shipping Description (Land)

Not regulated

IMO-IMDG Shipping Description (Sea)

Not regulated

IATA Shipping Description (Air)

Not regulated

15. REGULATORY INFORMATION

GHS Hazard Statements

Please refer to section 2.

GHS Precautionary Statements

Please refer to section 2.

16. OTHER INFORMATION

Revision date : April 25,2022

Disclaimer & Caution

Please refer to all relevant technical information specific to the product, prior to use. The information contained in this document is obtained from current and reliable sources. New Directions Aromatics Inc. provides the information contained herein, but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As the ordinary or otherwise use(s) of this product is outside the control of New Directions Aromatics Inc., no representation or warranty, expressed or implied, is made as to the effect(s) of such use(s), (including damage or injury), or the results obtained. The liability of New Directions Aromatics Inc. is limited to the value of the goods and does not include any consequential loss. New Directions Aromatics Inc. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon. New Directions Aromatics Inc. shall not be responsible for any damages resulting from use of or reliance upon this information. In the event of any dispute, the Customer hereby agree that Jurisdiction is limited to the province of Ontario, Canada.