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

<table>
<thead>
<tr>
<th>Product Name</th>
<th>CAS NO</th>
<th>EC NO</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ascorbic acid (L-)</td>
<td>50-81-7</td>
<td>200-066-2</td>
<td>100 %</td>
</tr>
</tbody>
</table>

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.

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5. **FIRE FIGHTING MEASURES**

- **Suitable extinguishing media**

- **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 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White, crystalline powder</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor.</td>
</tr>
<tr>
<td>pH</td>
<td>2.1 to 2.6 @ 5%, W/V</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Decomposition Temperature: 190 °C to 192 °C</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.65 g/cm³</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>-1.85</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>660°C (1220°F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>190°C (374°F)</td>
</tr>
<tr>
<td>Optical rotation</td>
<td>+20.5° to +21.5°</td>
</tr>
</tbody>
</table>
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 : May 03, 2021

Disclaimer & Caution

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