A Brand of D.I.S. Company Limited

Material Safety Data Sheet

Ascorbic Acid

1. IDENTIFICATION OF SUBSTANCE

MSDS Name : Ascorbic Acid
Synonyms : Ascorbic Acid
CAS No. : 50-81-7
Formula : C6H8O6

2. COMPANY IDENTIFICATION

Company Name : D.I.S Company Limited
Tel. : +1 416 499 9040
Fax : +1 416 499 5417
Web : www.dolchem.com
Address : 1370 Don Mills Road Suite #300 Toronto, Ontario M3B 3N7

3. HAZARDS IDENTIFICATION

- **Classification of the substance or mixture**:
  Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
  This substance is not classified as dangerous according to Directive 67/548/EEC.

- **Label elements:**
  The product does not need to be labelled in accordance with EC directives or respective national laws
- **Other hazards**
  None

Composition/information on ingredients

Component	Classification	Concentration
Ascorbic acid		
		<= 100 %

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Ascorbic acid		
		<= 100 %

4. FIRST AID MEASURES

- Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

- Indication of any immediate medical attention and special treatment needed
  No data available

5. FIRE FIGHTING MEASURES

- Special hazards arising from the substance or mixture:
  No data available
- Fire Extinguishing Media:
  Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Special Information:
  Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:
  Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
- Environmental precautions:
  Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- Methods and materials for containment and cleaning up
  Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING and STORAGE

- Handling Conditions:
  Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Keep away from heat and sources of ignition.

- Storage Conditions:
  Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Air, light, and moisture sensitive

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

- Control parameters
  Components with workplace control parameters

- Exposure controls:
  General industrial hygiene practice..
- Personal protective equipment
  Eye/face protection
  Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

  Skin protection
  Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: white crystal or crystalline powder
Odor	: odourless
Vapor Density (Air=1)	: NA
Vapor Pressure (mm Hg)	: NA
Boiling Point	: NA
Melting Point	: 190°C
Evaporation Rate (BuAc=1)	: NA
Autoignition Temperature	: NA
Flash Point	: NA
pH Value (100g/l)	: 1,0 – 2.5 at 176 g/l at 25 °C
Explosion Limits, lower	: NA
Explosion Limits, upper	: NA
Decomposition Temperature	: NA
Vapour density:	: NA
Molecular Formula	: $C_6H_8O_6$
Molecular Weight	: 176.12

10. STABILITY AND REACTIVITY

- Stability:
  Stable under normal conditions of storage and handling.
- Incompatibility:
  Strong oxidizing agents.
- Possibility of hazardous reactions:
  No data available.
- Hazardous Decomposition Products:
  Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 11.900 mg/kg Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Behavioral:Somnolence (general depressed activity). Diarrhoea

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
Mouse
Liver
Other mutation test systems
Mouse
Micronucleus test

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

Additional Information
RTECS: No data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

- Toxicity
  No data available
- Persistence and degradability
  No data available
- Bioaccumulative potential
  No data available
- Mobility in soil
  No data available
- Results of PBT and vPvB assessment
  No data available.
- Other adverse effects
  No data available.

13. DISPOSAL CONSIDERATIONS

- Waste Disposal:
  Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change

the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

- UN number
  ADR/RID: - IMDG: - IATA: -
- UN proper shipping name

  ADR/RID: Not dangerous goods
  IMDG: Not dangerous goods
  IATA: Not dangerous goods

- Transport hazard class(es)
  ADR/RID: - IMDG: - IATA: -
- Packaging group
  ADR/RID: - IMDG: - IATA: -
- Environmental hazards
  ADR/RID: no IMDG Marine pollutant: no IATA: no
- Special precautions for user
  No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.2

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  No data available
- Chemical safety assessment
  For this product a chemical safety assessment was not carried out

16. ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.