

ASCORBIC ACID**MATERIAL SAFETY DATA SHEET**

INTEGRA Chemical Company
 710 Thomas Ave SW
 Renton, WA 98055
 Phone: 425-277-9244
 Chemtrec 24 Hour Emergency Response Telephone: 800-424-9300

MSDS Number: A933
 Revision Date: 04-Nov-97
 Revision #: 002

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Product Identification

Product Name: ASCORBIC ACID
Synonyms: Vitamin C, L-(+)-Ascorbic acid
Chemical Formula: C₆H₈O₆
Formula Weight: 176.13
Chemical Family: Organic Acid
Integra Product Numbers: A933.10; A933.31

Hazard Overview

HMIS Rating: 0-1-0-B **NFPA Rating:** NE
Warning Label:

Caution.

Use safe chemical handling practices. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

Components

Component	CAS #	%
Ascorbic acid	00050-81-7	100

Physical Data

Boiling Point:	dec 218 °C	Specific Gravity:	1.65 Water=1
Melting Point:	192 °C	Evaporation Rate:	NA
Vapor Pressure	NA	Vapor Density:	NA Air = 1

Solubility:

62 g/100 ml water @25°C

Appearance and Odor:

Fine white crystals. No odor.

Fire and Explosion Data

Flash Point: NA **Test Method:**
Auto-ignition Temperature: NA
Flammable Limits (% by volume in air) Upper: NA Lower: NA

Fire Extinguishing Media:Water spray, CO₂, dry chemical or foam.**Special Firefighting Procedures:**

Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Unusual Fire and Explosion Hazards:

As with most organic solids, combustion is possible at elevated temperatures.

Health Hazard Information**Effects of Overexposure****Skin Contact:**

Contact may cause skin irritation.

Eye Contact:

Contact may be irritating to the eyes.

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Health Hazard Information

Ingestion:

No harmful effects expected.

Inhalation:

Inhalation may irritate the nose, throat and upper respiratory tract.

Chronic Effects of Overexposure:

None Identified

Exposure Limits:

	<u>TWA</u>	<u>OSHA PEL</u> <u>STEL</u>	<u>Ceiling</u>
Ascorbic acid	NE	NE	NE
	<u>TWA</u>	<u>ACGIH TLV</u> <u>STEL</u>	<u>Ceiling</u>
Ascorbic acid	NE	NE	NE

Toxicity Data:

Ascorbic acid No information available.

Medical Conditions Generally Aggravated by Exposure:

None Identified

Target Organs:

None Identified

Reproductive Effects:

None Identified

Carcinogenicity:

None Identified

<u>Component</u>	<u>NTP Listing</u>	<u>IARC Listing</u>	<u>OSHA Regulated</u>
Ascorbic acid	No listing	No Listing	<input type="checkbox"/>

Emergency First Aid Procedures

Skin Contact:

Wash with soap and water. Seek medical attention if irritation develops.

Eye Contact:

Flush eyes with water. If irritation persists, seek medical attention.

Inhalation:

Remove to fresh air.

Ingestion:

Do not induce vomiting. If adverse symptoms develop, seek medical attention.

Additional First aid and Treatment Notes:

No information available

Reactivity Data

Stability:

Stable

Hazardous Polymerization: Will Not Occur

Incompatibles:

Incompatible with strong acids, strong bases, strong oxidizers.

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Reactivity Data

Decomposition Products:

Oxides of carbon (CO, CO₂)

Conditions to Avoid:

None indentified

Spill and Disposal Procedures

Spill and Leak Procedures:

Sweep or scoop into clean, dry disposal container. Wear protective equipment. Flush spill area with water.

Disposal Procedures:

Dispose in accordance with all Local, State and Federal regulations.

Protective Equipment

Ventilation:

Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.

Respiratory Protection:

None needed unless use generates annoying or irritating dusts, mists or vapors. Use a dust/mist respirator mask if necessary.

Skin and Eye Protective Equipment:

Safety glasses. Use good chemical handling practices.

Storage and Handling Precautions

Storage Area: GENERAL

Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Protect containers from physical damage.

Transportation Information

Regulated Material domestic ground transportation

(reference: CFR Title 49, Transportation)

Proper Shipping Name:
UN or NA Identification number:
Packing Group:

Hazard Class and Label:
Subsidiary Risk and Label:

Regulated Material via Air Transportation

(reference: ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air)

Proper Shipping Name:
UN Identification Number:
Packing Group:

Hazard Class and Label:
Subsidiary Risk and Label:

Packing Instruction Max net qty per package

Passenger Aircraft:
Cargo Aircraft:

Regulatory Information

<u>Component</u>	<u>TSCA</u> <u>Inventory</u>	<u>CERCLA</u> <u>RQ</u>	<u>SARA EHS</u> <u>TPQ</u>	<u>SARA 313 Toxic Release</u> <u>de minimus</u>
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<u>Component</u>	<u>TSCA</u> <u>Inventory</u>	<u>CERCLA</u> <u>RQ</u>	<u>SARA EHS</u> <u>TPQ</u>	<u>SARA 313 Toxic Release</u> <u>de minimus</u>
Ascorbic acid	<input checked="" type="checkbox"/>	lbs	<input type="checkbox"/>	lbs
<u>SARA Hazard Categories:</u>	<u>Acute</u>	<u>Chronic</u>	<u>Flammability</u>	<u>Pressure</u>
Ascorbic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Clean Air Act Categories:</u>	<u>SOCMI</u>	<u>HAP</u>	<u>Volatile HAP</u>	<u>Organic HAP</u>
Ascorbic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NE = Not established, NA = Not applicable or Not available

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***** END OF MSDS *****

