

Material Safety Data Sheet

Version 3.1
Revision Date 03/12/2008
Print Date 04/07/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : L-Ascorbic acid

Product Number : A92902
Brand : Sigma-Aldrich

Company : Sigma-Aldrich Canada, Ltd
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Antiscorbutic factor
L-Threoascorbic acid
Vitamin C

Formula : $C_6H_8O_6$
Molecular Weight : 176.12 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
Ascorbic acid			
50-81-7	200-066-2	-	-

3. HAZARDS IDENTIFICATION**WHMIS Classification**

Not WHMIS controlled.

Not WHMIS controlled.

HMIS Classification

Health Hazard: 0
Flammability: 0
Physical hazards: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

4. FIRST AID MEASURES

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
Flush eyes with water as a precaution.

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

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point no data available

Ignition no data available
temperature

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Light sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form **solid**

Safety data

pH **1.0 - 2.5 at 176 g/l at 25 °C (77 °F)**

Melting point **193 °C (379 °F)**

Boiling point **no data available**

Flash point **no data available**

Ignition temperature **no data available**

Lower explosion limit **no data available**

Upper explosion limit **no data available**

Water solubility **176 g/l at 20 °C (68 °F) - completely soluble**

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Light.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

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

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

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.

Genotoxicity in vitro - mouse - Liver

Other mutation test systems

Genotoxicity in vivo - mouse - Intraperitoneal

Micronucleus test

Signs and Symptoms of Exposure

Chronic ingestion of large doses may cause gastrointestinal disturbances including nausea and diarrhea, urinary effects involving urine acidification, oxalate and uric crystallization in the bladder and kidney, and decreased reaction times and psychomotor coordination.

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Additional Information

RTECS: CI7650000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

TSCA Status

On TSCA Inventory

DSL Status

All components of this product are on the Canadian DSL list.

WHMIS Classification

Not WHMIS controlled.

Not WHMIS controlled.

16. OTHER INFORMATION

Further information

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