

SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 01/10/2019

Version 1.6

SECTION 1. Identification

Product identifier

Product number	AX1775
Product name	L(+)-Ascorbic Acid GR ACS
CAS-No.	50-81-7

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Reagent for analysis
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Details of the supplier of the safety data sheet

Company	EMD Millipore Corporation 400 Summit Drive Burlington Massachusetts 01803 United States of America General Inquiries: +1 800-645-5476 Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.
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Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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SECTION 2. Hazards identification

GHS Classification

Combustible dust

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-Labeling

Signal Word
Warning

Hazard Statements
May form combustible dust concentrations in air.

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Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula	C ₆ H ₈ O ₆ (Hill)
Molar mass	176.12 g/mol
Remarks	No hazardous ingredients according to the OSHA Hazard Communication Standard 29 CFR 1910.1200.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

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Combustible.

Risk of dust explosion.

Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

Suppress (knock down) gases/vapors/mists with a water spray jet.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Protected from light.

Store at room temperature.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

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Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break through time:	480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

Physical state

solid

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Color	white
Odor	odorless
Odor Threshold	Not applicable
pH	2.2 - 2.5 at 50 g/l 68 °F (20 °C)
Melting point	No information available.
Boiling point/boiling range	Not applicable
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	Not applicable
Relative vapor density	Not applicable
Density	1.65 g/cm ³ at 68 °F (20 °C)
Relative density	No information available.
Water solubility	330 g/l at 75 °F (24 °C)
Partition coefficient: n-octanol/water	log Pow: -2.15 (Lit.) Bioaccumulation is not expected.
Autoignition temperature	No information available.
Decomposition temperature	> 378 °F (> 192 °C)

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Viscosity, dynamic	at 68 °F (20 °C) Not applicable
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Ignition temperature	716 °F (380 °C)
Bulk density	ca.500 - 900 kg/m ³

SECTION 10. Stability and reactivity

Reactivity

Reducing agents
Risk of dust explosion.

Chemical stability

sensitive to moisture
Sensitivity to light
Sensitive to air.

Possibility of hazardous reactions

Violent reactions possible with:
Aluminum, Copper alloys, Zinc, metal ions, Oxidizing agents, Copper, Acids, bases

Conditions to avoid

Strong heating (decomposition).

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Acute oral toxicity

LD50 Rat: 11,900 mg/kg (RTECS)

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Skin irritation

Rabbit

Result: No irritation

OECD Test Guideline 404

Eye irritation

Rabbit

Result: slight irritation

OECD Test Guideline 405

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC

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

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information

Substances which occur in nature

Chronic uptake results in damage of:

Kidney

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to fish

LC50 *Oncorhynchus mykiss* (rainbow trout): 1,020 mg/l; 96 h

OECD Test Guideline 203 acidic

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Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 360 mg/l; 48 h (External MSDS)

Toxicity to algae

IC50 Desmodesmus subspicatus (green algae): 1,750 mg/l; 72 h (External MSDS)

Toxicity to bacteria

EC50 Pseudomonas putida: 140 mg/l; 16 h (External MSDS)

Persistence and degradability

Biodegradability

97 %; 5 d

OECD Test Guideline 302B

Readily eliminated from water

Ratio BOD/ThBOD

BOD28 65 %

Closed Bottle test

BOD5 48 %

Closed Bottle test

Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: -2.15

(Lit.) Bioaccumulation is not expected.

Mobility in soil

No information available.

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

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Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

(company-internal/in-house) Occupational Exposure Limit (company OEL)

Internal company value 2 mg/m³

Short Term Exposure (15 4

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min) Factor

Pregnancy risk groups C

There is no reason to fear damage to the embryo, or fetus when the company OEL value is observed.

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date 01/10/2019

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

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