



## SAFETY DATA SHEET

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

Revision Date 09/11/2014

Version 1.1

### 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   290 Concord Road, Billerica, MA 01821, United States of America   General Inquiries: +1-978-715-4321   Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)
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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.

#### Other hazards

None known.

### SECTION 3. Composition/information on ingredients

Formula	C <sub>6</sub> H <sub>8</sub> O <sub>6</sub> (Hill)
Molar mass	176.12 g/mol

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Remarks No hazardous ingredients according to the OSHA Hazard  
Communication Standard 29 CFR 1910.1200.

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**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.

*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.

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**SECTION 5. Fire-fighting measures**

**Extinguishing media**

*Suitable extinguishing media*

Water, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

*Unsuitable extinguishing media*

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

**Special hazards arising from the substance or mixture**

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.

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**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.

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Advice for emergency responders: Protective equipment see section 8.

**Environmental precautions**

Do not empty into 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.

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**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.

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**SECTION 8. Exposure controls/personal protection**

**Exposure limit(s)**

Contains no substances with occupational exposure limit values.

**Engineering measures**

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.

*Eyeface protection*

Safety glasses

*Hand protection*

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

*Respiratory protection*

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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**SECTION 9. Physical and chemical properties**

Physical state solid

Color white

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Odor	odorless
Odor Threshold	Not applicable
pH	2.2 - 2.5 at 50 g/l 68 °F ( 20 °C)
Melting point	190 - 192 °C (decomposition)
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	May form combustible dust concentrations in air.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	at 68 °F ( 20 °C) Not applicable
Relative vapor density	at 68 °F ( 20 °C) Not applicable
Density	1.65 g/cm <sup>3</sup> 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)
Viscosity, dynamic	at 68 °F ( 20 °C) Not applicable
Explosive properties	Not classified as explosive.
Oxidizing properties	none

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Ignition temperature 716 °F ( 380 °C)  
Bulk density ca. 500 - 900 kg/m<sup>3</sup>

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**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

**Conditions to avoid**

Strong heating (decomposition).

**Incompatible materials**

no information available

**Hazardous decomposition products**

no information available

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**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)

*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.

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*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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
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**

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Substances which occur in nature

Handle in accordance with good industrial hygiene and safety practice.

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**SECTION 12. Ecological information**

**Ecotoxicity**

*Toxicity to fish*

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

OECD Test Guideline 203 acidic

*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

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**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.

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**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.

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**SECTION 14. Transport information**

**Land transport (DOT)**

Not classified as dangerous in the meaning of transport regulations.

**Air transport (IATA)**

Not classified as dangerous in the meaning of transport regulations.

**Sea transport (IMDG)**

Not classified as dangerous in the meaning of transport regulations.

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**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.

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**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.

**Pennsylvania Right To Know**

*Ingredients*

Ascorbic acid

**New Jersey Right To Know**

*Ingredients*

Ascorbic acid

**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.

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**SECTION 16. Other information**

**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](http://www.wikipedia.org).

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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