

SAFETY DATA SHEET

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: DL-MALIC ACID
Control Number: 00258
Product Description: Dicarboxylic Acid

COMPANY IDENTIFICATION

Supplier: Chemical Distribution Solutions
1125 Oak St. Ste. 303
Conway, AR 72032

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC
General Information: (501) 978-1111

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

[Health] [Environmental] [Physical]
Acute toxicity, Oral Category 4
Skin irritation, Category 2
Serious eye damage, Category 1

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard statements:

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P313 + P331 IF SWALLOWED: Do not induce vomiting. Get medical attention/advice.
P302 + P352 IF ON SKIN: Wash with soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Get medical attention/advice.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
DL-Malic Acid	617-48-1	100

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SECTION 4 - FIRST AID MEASURES

FIRST AID PROCEDURES:

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Skin Contact: Wash with soap and water. Seek medical attention if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention if symptoms appear.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention if symptoms appear.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Hazardous combustion products: Oxides of carbon.

Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Unusual Fire and Explosion Hazards: Dust in the presence of an ignition source or mechanical impact presents an explosion hazard.

SECTION 6 - ACCIDENTAL RELEASE and DISPOSAL MEASURES

Spills: Provide adequate ventilation. Avoid dust formation. Avoid breathing vapors, mist or gas. Suitable protective clothing should be worn. Shut off or plug source of spill. Small spills: sweep up and collect into suitable container.

Large Spills: Dike spill area to contain spillage. Salvage as much re-useable material as possible into a suitable container. Then sweep up and shovel into a suitable container for disposal according to regulations

SECTION 7 - STORAGE AND HANDLING

Handling: Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers. Avoid moisture and water sources.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of dust vapor or mists below the applicable workplace exposure limits indicated below.

Exposure Limits: DL-Malic Acid Contains no substances with occupational exposure limit values.

Personal Protective Equipment (PPE):

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

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SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: 397 °F
Autoignition Temperature: 660 °F
Boiling Point: Decomposes at 284 °F
Melting Point/Freezing Point: 268 °F
Vapor Pressure: No available data
Vapor Density (Air-1): Not applicable
Odor/Appearance: Crystalline solid with no odor

Flammability Limits: No available data
Specific Gravity: 1.60
Volatile %: Not applicable
Evaporation Rate (Water=1): Not applicable
pH: No available data
Solubility in Water: partially (58%)

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: Excess heat, incompatible materials.
Incompatible Materials: Reactive with oxidizing agents, alkalis, amines, and alkali metals.
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:

Skin: Cause redness and irritation. Severity depends on the amount and duration of exposure.

Eyes: Dust is irritating to the eyes. Contact will cause stinging and tearing.

Inhalation: Excessive inhalation of high concentrations are harmful. Dust will irritate the respiratory tract.

Ingestion: If swallowed this material will irritate the mucous membranes of the mouth throat and esophagus. Aspiration of this material into the lungs may result in damage or death.

Acute oral toxicity:

Malic Acid: LD50: Rat: 1600 mg/kg

Acute inhalation toxicity:

Malic Acid: LC50 rat: No available data

Acute dermal toxicity:

Malic Acid: LD50 rabbit: No available data

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: No available data.

Bio-accumulative potential: No available data.

Mobility: No available data.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 - TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Not a DOT Controlled Material

Hazard Class

UN Number:

Packaging Group:

SECTION 15 · REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material has not been established.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Acute Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories:

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.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA

Clean Air Act: None of the chemicals in this product are listed as Hazardous Substances under the CAA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 · OTHER INFORMATION

MSDS Revision Date: February 2015

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 2

Flammability: 1

Reactivity: 0

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.