

Safety Data Sheet

Section 1: Identification

Trade Name: Malic acid Synonyms: 2-Hydroxysuccinic acid, L-Hydroxybutanedioic acid Company: Soapgoods Inc Address: 1824 Willow Trail Pkwy, Ste 200. Norcross. GA 30093 Phone: (404) 924-9080 E-Mail: wecare@soapgoods.com Emergency Phone: Chemtrec 1 800 424 9300 - CAS number 6915-15-7

Section 2: Hazard(s) Identification

According with the version of the Globally Harmonized system of Classification and labeling adopted in the United states and Regulation 1272/2008/EC [CLP]: Eyes irritant category 2(H319)



Signal word: Warning Hazard Statement: Causes serious eye irritation. H319 Precautionary Statement: Wash hands thoroughly after handling. P264 Wear eye protection. P280 Precautionary Statement. IF IN EYES: P305 Response: Rinse cautiously with water for several minutes. P351 Remove contact lenses, if present and easy to do Continue rinsing. P338 If eye irritation persists: P337 Get medical advice/attention. P313

2.3. OTHER HAZARDS

FIRE AND EXPLOSION HAZARD:

May form combustible dust concentrations in air. Possibility of dust explosion. it is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions. Do not allow dust to

accumulate on flat surfaces, on rafters or building structural components. Keep away from all ignition sources including heat, sparks and flame.

Section 3: Composition/Information on Ingredients

- Chemical name Malic acid -

CAS number 6915-15-7

- EINECS number 230-022-8

-Synonyms Butanedioic acid, hydroxy accidulant , food additive E 296

Section 4: First-Aid Measures

4.1 DESCRIPTION OF FIRST AID MEASURES

- General advise Seek medical attention if irritation develops after first aid application

- Inhalation Move people from the exposure to fresh air.

- Skin contact Wash skin with soap and water.

- Eye contact Remove particulates by irrigating with eye wash solution or

clean water, holding eyelids apart.

- Ingestion Wash mouth and flush throat upto the stomach.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

ROUTE(S) OF ENTRY: Skin Contact; Eye Contact

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE SKIN CONTACT: This product is irritating to the skin resulting in reddening, stinging, and swelling.

ACUTE EYE CONTACT: This product is irritating to the eyes resulting in stinging, reddening, tearing, and swelling.

CHRONIC EFFECTS OF EXPOSURE: No applicable information was found concerning any adverse chronic

health effects from overexposure to this product.

CARCINOGENICITY: The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE: Persons with pre-existing eye or skin disorders may be more susceptible to the effects of this product.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED. None Anticipated

Section 5: Fire-Fighting Measures

5.1 EXTINGUISHING MEDIA

Water spray, dry powder, carbon dioxide or media appropriate for surrounding fire. Use of water jet may cause explosive dust conditions.

5.2 SPECIFIC HAZARDS

FIRE AND EXPLOSION HAZARD: Possibility of dust explosion. It is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions. Do not allow dust to accumulate on flat surfaces, on rafters or building structural components. Use of water jet may cause explosive dust conditions. SEE NFPA 61, Standard for the prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 or later Edition, and other related standards. 5.3 SPECIFIC PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS Wear self-contained breathing apparatus and full protective gear. Use water spray to cool fire exposed containers. FLAMMABILITY CLASS (OSHA) Not applicable HAZARDOUS COMBUSTION PRODUCTS

Carbon dioxide and carbon monoxide

Section 6: Accidental Release Measures

6.1 PERSONAL PRECAUTIONS

Use personal protective equipment. Wear eye protection. Avoid contact with skin and eyes. 6.2 ENVIRONMENTAL PRECAUTIONS Prevent further leakage or spillage if safe to do so. No special environmental precautions required 6.3 METHODS FOR CLEANING UP Vacuum or sweep spills. Minimize dust generation. If washing down spilled area is necessary, use copious amounts of water and control runoff. Follow local, state and federal regulations for product disposal 6.4 REFERENCE TO OTHER SECTIONS See Section 7 for information on safe handling See Section 8 for information on personal protection equipment

See Section 13 for disposal information

Section 7: Handling and Storage

7.1 PRECAUTIONS FOR SAFE HANDLING

See NFPA 61, Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and other related standards. Use with adequate ventilation. Minimize dust generation and accumulation; dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are disturbed. All dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions and may require explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Bonding and grounding systems may be required.

Dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) should be designed to limit or prevent leakage of dust into the work area.

Do not allow dust to accumulate on flat surfaces, on rafters or building structural components. Routine housekeeping should be instituted to reduce dust accumulation. Use Avoid dispersal of dust in the air; use vacuum or wet sweeping methods. Do not use compressed air to clean surfaces.

Keep away from all ignition sources including heat, sparks, and flame. Where dust accumulations occur use non-sparking tools.

7.2 CONDITIONS OF SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in a cool dry place. Store in a tightly closed container/bag.

The packaging material should have reasonable moisture and air barriers and comply with food regulations.

Section 8: Exposure Controls/Personal Protection

8.1 CONTROL PARAMETERS

Exposure limits: Nuisance dust (also called particulate not otherwise regulated (PNOR)).

OSHA PEL: 15 mg/ mg/m3 Total dust

5 mg/m3 Respirable dust

ACGIH TLV: 10 mg/m3 Inhalable dust

5 mg/m3 Respirable dust

15 mg/m3 Total dust

8.2 EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS:

Ventilation: See NFPA 61, Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and National Fire Protection Association 650, Standard for Pneumatic Conveying Systems for Handling Combustible Materials, 1997 Edition and other related standards. Normal industrial hygiene measures should be sufficient for protection of employees from exposure to dusts. Local and mechanical exhaust is desirable when dumping bags.

APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT:

Eye protection: Safety glasses are recommended. Safety goggles are desirable when dumping

bags.

Emergency wash facilities: Eye wash is recommended for conditions where dust generation is likely.

Special protective clothing: Not normally required.

Gloves: Not normally required. Use ordinary work gloves if dust dries skin.

Respirator: NIOSH approved N-95 dust respirator if working in situations that could generate large amounts of airborne dust.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS: See section 5.

Section 9: Physical and Chemical Properties

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- Physical form Powder
- Color White to off-white
- Odor Essentially odorless to very slight sugar odor
- pH (concentration) NA
- Boiling point NA
- Flash point 273°C (397°F)
- Melting/freezing point NA
- Decomposition temperature NA
- Auto-ignition temperature NA
- Explosion properties NA
- Oxidising properties NA
- Vapour pressure NA
- Vapor density NA
- Relative density NA
- Bulk density NA
- Specific gravity 1.609
- Viscosity NA
- Water solubility 56% (20°C)
- Solubility (non aqueous) Methyl alcohol: completely miscible
- Partition coefficient NA
- Dissociation constant NA
- Evaporation rate NA.
- 9.2 OTHER INFORMATION

Section 10: Stability and Reactivity

10.1 REACTIVITY

Stable 10.2 CHEMICAL STABILITY Stable under normal conditions. Polymerization will not occur. 10.3 POSSIBILITY OF HAZARDOUS REACTIONS Not applicable 10.4 CONDITIONS TO AVOID Practices which produce dust or disperse finely divided dust in air. See NFPA 61. Standard for the Prevention of Fire and Dust Explosions in Agricultural and Food Processing Facilities, 2008 Edition, and other related standards. 10.5 INCOMPATIBLE MATERIALS Oxidizing agents, strong acids 10.6 Hazardous decomposition products: Nothing unusual

Section 11: Toxicological Information

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

- Inhalation ORAL : DL50 : 1600-3200 mg/kg bw (mouse)
- Ingestion No effects known or anticipated.
- Skin irritation / corrosion Sustained exposure in a dusty manufacturing environment may result in mechanical irritation in the creases of the skin, particularly at the fingers, or other drying effects. no health effects known or anticipated.
- Eye irritation Irritating to eyes.
- Skin sensitisation Not sensitizing
- Chronic toxicity Not known or anticipated
- Genetic toxicity Not known or anticipated
- Carcinogenicity Not classifiable as Carcinogen.
- Reprotoxicity Not known or anticipated
- Specific effects Not applicable

Section 12: Ecological Information

12.1 TOXICITY FISH LC=295 mg/l 12.2 PERSISTENCE/DEGRADABILITY Ready biodegradable 12.3 BIOACCUMULATIVE POTENTIAL Log Kow <3, not bioaccumulative 12.4 MOBILITY IN SOILNot applicable12.5 BPT, vPvBThe substance does not meet the criteria for PBT or vPvB.12.6 OTHER ADVERSE EFFECTSNone known

Section 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS

Follow local, state and federal regulations for product disposal. Not a hazardous waste unless contaminated with hazardous products.

Section 14: Transport Information

International regulations (RID/ADR; RTMDR; IMDG; IATA/OACI): Not classified as dangerous for transport.

DOT shipping label: Non-hazardous

Section 15: Regulatory Information

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS According with the version of the Globally Harmonized System of Classification and labeling adopted in the United States and Regulation 1272/2008/EC(CLP): Classified 15.2 CHEMICAL SAFETY ASSESSMENT US FEDERAL REGULATIONS: Clean Air Act: ODS: Not applicable. SARA (EPCRA) Section 313 (40 C.F.R. § 372.65): Not applicable. TSCA Status: On TSCA inventory. STATE REPORTING REQUIREMENTS: California Proposition 65: Not applicable.

Section 16: Other Information

See Hazard Communication Guidance for Combustible Dusts, OSHA 3371-08 2009, U.S. Occupational Safety and Health Administration, https://www.osha.gov/Publications/3371combustible-dust.html (accessed 10/8/14)

And

NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing,

Processing, and Handling of Combustible Particulate Solids, for general safe handling and design guidance.

Other classifications of the substance:

TSCA STATUS: On TSCA Inventory.

FDA STATUS: Citrus acid, Anhydrous complies with FDA Regulation 21 C.F.R. § 184.1033;

CALIFORNIA PROPOSITION 65: Not applicable.

HMIS rating:

Health: 1

Flammable: 0

Reactivity: 0

(0 = minimal; 1 = slight; 2 = moderate; 3 = serious; 4 = severe)

Safety Data Sheet according to Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Disclaimer

Soapgoods it's affiliates and any other officers, directors or employees, agents, third-party content providers, merchants, sponsors, licensors or the like (now referred to as Soapgoods) cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge, and experience currently available. You expressly agree that your use of this MSDS is at your sole risk. Soapgoods expressly disclaims all express or implied warranties or mechantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use the ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis.

All information appearing herein is based upon the data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Soapgoods makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Soapgoods control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

Review Date: September 2017