



SAFETY DATA SHEET

Colonial Chemical Solutions, Inc.

SECTION 1 · COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: FUMARIC ACID
Control Number: 00176
Product Description: Dicarboxylic Acid

COMPANY IDENTIFICATION

Supplier: COLONIAL CHEMICAL SOLUTIONS, INC.
916 West Lathrop Avenue
Savannah, Georgia 31415

24 Hour Emergency Telephone: (800)-424-9300 CHEMTREC
General Information: (912) 236-1331

SECTION 2· HAZARDS IDENTIFICATION

GHS Classification:

[Health]

Eye irritation Category 2B

[Environmental]

Acute aquatic toxicity Category 3
Chronic aquatic toxicity Category 3

[Physical]

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Warning

Hazard statement(s)

H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Fumaric acid	110-17-8	100

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SECTION 4 · FIRST AID MEASURES

FIRST AID PROCEDURES:

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Ingestion: Do not induce vomiting. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

SECTION 5 · FIRE FIGHTING MEASURES

Extinguishing Media: Water spray, dry chemical, carbon dioxide or ordinary foam are recommended.

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: None known.

Fire and Explosion Hazards: Not considered a fire or an explosion hazard.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container.

SECTION 7 · STORAGE AND HANDLING

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide adequate 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: Fumaric Acid Contains no substances with occupational exposure limit values.

Personal Protective Equipment (PPE):

Eyes: Eye Protection when pouring. Goggles or full-face shield are recommended.

Skin: Wear neoprene gloves, apron, and/or clothing. Viton gloves are recommended.

Clothing: Selection of protective clothing depends on 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 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.

Other Equipment: Eye wash station and shower in close proximity to use are advised.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: 446 °F
Autoignition Temperature: 1364 °F
Boiling Point: 329 °F
Melting Point/Freezing Point: 549 °F
pH: 2.1 at 4.9 g/l
Solubility in Water: Slightly
Odor/Appearance: White solid with no appreciable odor.

Flammability Limits: Lower: 3 Upper: 40
Specific Gravity: 1.635
Volatile %: Nil
Evaporation Rate (BuAc=1):
Vapor Density (Air-1): <1
Vapor Pressure: 1.7 mmHg

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable under normal use conditions.
Conditions to Avoid: Contact with incompatibles.
Incompatibility: Avoid contact with oxidizing agents, amines, strong bases.
Hazardous Decomposition Products: Oxides of Carbon.
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:
Skin: Contact can cause redness and irritation.
Eyes: Dust is irritating to the eyes. Contact will cause stinging and tearing.
Inhalation: Excessive inhalation of high concentrations may be harmful. Dust or aerosol can irritate the throat and lungs.
Ingestion: If swallowed this material will irritate the mucous membranes of the mouth throat and esophagus.

Acute oral toxicity:
LD50 rat: 9,300 mg/kg
Acute inhalation toxicity:
LC50 rat: No available data
Acute dermal toxicity:
LD50 Rabbit: 20,000 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: Toxicity to fish mortality - Danio rerio (zebra fish) - 245 mg/l - 48 h
Bio-accumulative potential: No Bioaccumulation data available.
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/NA:
Packaging Group:

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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 is 5000 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies.

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, Chronic 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 CCA.

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

SECTION 16 · OTHER INFORMATION

MSDS Creation Date: November 2014

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 information above is believed to be accurate and represents the best information currently available to us. However, Colonial Chemical Solutions makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Colonial be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Colonial has been advised of the possibility of such damages. The vendor assumes no responsibility for injury or damages resulting from the inappropriate alteration or manipulation of this MSDS and its contents from that originally submitted by Colonial.