

Material Safety Data Sheet

Itaconic Acid

Section 1: Chemical Product and Company Identification

Product Name: Itaconic Acid

Contact Information:

Chemical Name: Itaconic Acid

CAS No.: 97-65-4

EINECS No.: 202-599-6

Customs Tariff No.: 29171900

Synonym Name: Methylenesuccinic acid,

Chemical Formula: C₅H₆O₄

Chemtrade International

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Qingdao, Shandong, China 266555

International Sales:

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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS No.	EINECS No.	%by weight
Itaconic Acid	97-65-4	202-599-6	99.5

Toxicological Data on Ingredients:

LD50: No information found

LC50: No information found

Section 3: Hazards Identification

Potential Acute Health Effects:

Inhalation: May cause irritation to the respiratory tract, with symptoms of Bronchitis

Ingestion: May cause abdominal cramps, nausea, vomiting, diarrhea

Skin Contact: Slightly irritating.

Eye Contact: May cause irritation.

Potential Chronic Health Effects:

Carcinogenic Effects: No information found

Mutagenic Effects: No information found

Developmental Toxicity: No information found

Teratogenic Effects: No information found

Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek a medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Seek a medical attention.

Serious Skin Contact: No information found

Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: No information found

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire and Explosion Data

Flammability of the Product: At a higher temperature.

Auto-Ignition Temperature: No information found

Flash Points: No information found

Flammable Limits: No information found

Products of Combustion: These products are carbon oxides (CO, CO₂) and water(H₂O).

Fire Hazards in Presence of Various Substances:

Non-flammable in presence of open flames and sparks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of moisture.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: No information found

Risks of explosion of the product in presence of static discharge: No information found

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam.

Special Remarks on Fire Hazards: No information found

Special Remarks on Explosion Hazards: No information found

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate. 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. Neutralize the residue with a dilute solution of sodium carbonate. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:

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. Do not allow contact with water. Keep from contact with moist air and steam.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below Recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist before handling this product.

Exposure Limits: No information found

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (white crystals)

Molecular Weight: 130.1 g/mole

Odor: Odorless.

Color: white crystals.

Boiling Point: 268°C (sublimes)

pH (5% water): 1.5-2.0

Melting Point: 167-169°C

Pka1: 3.824

Pka2: 5.658

Specific Gravity: 1.573 (Water = 1)

Vapor Pressure: No information found

Vapor Density (Air=1): No information found
Odor Threshold: No information found
Water/Oil Dist. Coeff.: No information found
Iconicity (in Water): No information found
Dispersion Properties: See solubility in water, methanol.
Evaporation Rate (BuAc=1): No information found
Solubility: solvents.

Section 10: Stability and Reactivity Data

Stability: The product is stable at room temperature in closed container under normal storage and handling conditions.
Instability Temperature: No information found
Conditions of Instability: No information found
Incompatibility with various substances: Reactive with oxidizing agents.
Conditions to Avoid: Incompatible materials, strong oxidizing agents, basis.
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Corrosivity: No information found
Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Eye contact .
Toxicity to Animals:
LD50: No information found
LC50: No information found
Special Remarks on Reactivity: No information found
Chronic Effects on Humans: No information found
Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.
Special Remarks on Chronic Effects on Humans: No information found
Special Remarks on other Toxic Effects on Humans: No information found

Section 12: Ecological Information

Ecotoxicity: No information found
Special Remarks on Toxicity to Animals: No information found
BOD₅ and COD: No information found
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation: No information found

Section 13: Disposal Considerations

Waste Disposal: Follow applicable local regulationr.

Section 14: Transport Information

US DOT: Not regulated as a hazardous material
Identification: No information found
Special Provisions for Transport: No information found

Section 15: Other Regulatory Information

US FEDERAL TSCA
CAS# 97-65-4 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 97-65-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 97-65-4: 0

Canada - DSL/NDSL

CAS# 97-65-4 is listed on Canada's DSL List.

Canada – WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List**Section 16: Other Information**

Other Special Considerations: No information found

Product Use:

Production of organic synthetic materials such as synthetic resins, synthetic fiber, plastic, rubber, surface-active agents.

Revision Information:

DOT Classification: Not a DOT controlled material.

MSDS Creation date: June 1st, 2006, Revision date: January 1st, 2007

EMERGENCY CONTACT:

0086-533-2187500

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