



潍坊英轩实业有限公司

Weifang Ensign Industry Co., Ltd.

**** MATERIAL SAFETY DATA SHEET ****

Citric Acid, Monohydrate

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Citric Acid, Monohydrate

Catalog Numbers:

Synonyms:

2-Hydroxy-1, 2, 3-propanetricarboxylic acid monohydrate

Company Identification: WEIFANG ENSIGN INDUSTRY CO., LTD.

THE WEST END, LIMIN ROAD, CHANGLE COUNTY,

WEIFANG CITY, SHANDONG PROVINCE, CHINA 262400

For information, call: 0086 536 6272886

For emergencies, call: 0086 536 6298198

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS #	Chemical Name	%	EINECS #	Haz Symbols	Risk Phrases
5949-29-1	Citric Acid, Monohydrate	>99.5	201-069-1		

Hazard Symbols: Xi

Risk Phrases: 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye:

Contact with eyes may cause severe irritation, and possible eye burns.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation:

Dust is irritating to the respiratory tract.

Chronic:

Not available.



**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid.

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:

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:

Dusts at sufficient concentrations can form explosive mixtures with air. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Storage:

Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.



**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear impervious gloves.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State:	Crystals
Color:	white
Odor:	odorless
pH:	Not available.
Vapor Pressure:	< 0.1 mbar @ 20 deg C
Viscosity:	Not available.
Boiling Point:	Not available.
Freezing/Melting Point:	100 deg C
Autoignition Temperature:	1000 deg C (1,832.00 deg F)
Flash Point:	100 deg C (212.00 deg F)
Explosion Limits, lower:	Not available.
Explosion Limits, upper:	Not available.
Decomposition Temperature:	Not available.
Solubility in water:	1630 G/L WATER (20°C)
Specific Gravity/Density:	1.5400g/cm ³
Molecular Formula:	C ₆ H ₈ O ₇ .H ₂ O
Molecular Weight:	210.14



**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases, metal nitrates.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 5949-29-1: GE7810000

LD50/LC50:

Not available.

Carcinogenicity:

Citric Acid, Monohydrate -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:

Acute aquatic effects: 96-hour LC50; Fathead minnow: GT 1000 mg/L. 96-hour LC50; Water flea: GT 1000 mg/L. 48-hour LC50; Golden orfe (minnow): 760 mg/L.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.



**** SECTION 14 - TRANSPORT INFORMATION ****

IATA

No information available.

IMO

No information available.

RID/ADR

No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

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 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 5949-29-1: 0

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 5949-29-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 5949-29-1 is not listed on the TSCA inventory.

It is for research and development use only.



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**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/23/2001 Revision #0 Date: Original.

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