



Material Safety Data Sheet


Rev. 4

Page 1 of 5

Section 1 - Product and Company Identification

Product name : Citric Acid, Anhydrous
Other names : --
Product use : Use as sour agent and preservatives in the foods and drinks. In the field of the chemical industry, cosmetics and laundry, it is used as antioxidant, Plasticizers, detergent.
Supplier's name : San Fu Chemical Co., Ltd.
Supplier's address : 340 Hsiao Hsin Li, Shan-Hua District, Tainan City, Taiwan, R.O.C.
Supplier's phone : 886-6-5837608 Emergency phone : 886-6-5837608
FAX. : 886-6-5839498

Section 2 - Hazards Identification

Classification : <ol style="list-style-type: none">1. Acute Toxicity Category 52. Corrosion/Irritation Category 23. Serious Eye Damage/Irritation Category 2A
The Most Important Hazards and effect Label element : <ul style="list-style-type: none">■ Hazard symbol : Exclamation Mark ■ Signal word : Warning
Hazard statement : <ol style="list-style-type: none">1. Harmful with ingestion (oral)2. Harmful with skin contact (skin)3. Cause skin tissue irritation4. Cause severe eye irritation
Precautionary statement : <ol style="list-style-type: none">1. Wear mouth protective equipments2. Avoid contact with eyes and skin.3. If contacted, wash with large amount of water then seek the medical attention immediately.4. If swallowed, seek medical attention immediately
Others Hazard : --

Section 3 - Composition/Information On Ingredients

Pure Substance :

Chemical name : Citric Acid, Anhydrous
Synonyms : Citric acid 、 2-Hydroxy-1,2,3-propanetricarboxylic acid 、 Aciletten 、 Anhydrous citric acid 、 beta-Hydroxytricarballic acid 、 Citretten 、 Citro
CAS No. : 77-92-9
Ingredient contributing to the hazard(%) : 99~100%



Material Safety Data Sheet

Rev. 4

Page 2 of 5

Section 4 - First Aid Measures

The First-aid Information :
<ul style="list-style-type: none">■ Inhalation : Move to the air fresh place, and beware of patient's breathing. If the discomfort occurs, seek the medical attention.■ Skin Contact :<ol style="list-style-type: none">1. Wash with large amount of water for at least 20 minutes.2. If the irritation occurs, seek the medical attention.■ Eye Contact :<ol style="list-style-type: none">1. Wash the eyes with large amount of water for at least 20 minutes.2. If the discomfort occurs, seek the medical attention.■ Ingestion :<ol style="list-style-type: none">1. If swallowed with large amount of this substance, seek the medical attention immediately. If patient is conscious, give large amount of water to drink.2. Seek the medical attention immediately.
The Most Important Symptoms and Hazardous Effects : --
Protection of First-aiders : No specific regulation.
Notes to a Physician : --

Section 5 - Fire Fighting Measures

Extinguishing Media : Water, powder, chemical foam, CO ₂
Specific Hazards when Fire-fight : --
Specific Fire-fighting Procedure : None
Specific Protection of Firefighters : Wear full piece protective goggles with positive pressure mode, dust proof chemical safety goggles, protective gloves.

Section 6 - Accidental Release Measures

Personal Precautions : Avoid contact. Avoid generating into dust.
Environmental Precautions : Avoid generating the dust, keeps well ventilation.
Methods for Cleaning up : Sweep into the proper container for recycling or managing.

Section 7 - Handling and Storage

Handling : <ol style="list-style-type: none">1. Maintain proper ventilation in the area.2. Avoid generating and accumulating the dust.
Storage : <ol style="list-style-type: none">1. Keep in the container closed and tightly.2. Store in the cool, dry and well ventilation place.3. Away from the incompatibles.

Section 8 - Exposure Controls & Personal Protection

Engineering measures : Use the proper ventilation equipments and maintain the low concentration in the airborne.
--



Material Safety Data Sheet

Rev. 4

Page 3 of 5

Control parameters			
TWA	STEL	Ceiling	Biological standards
--	--	--	--
Personal protective equipment : <ul style="list-style-type: none">■ Respiratory Protection :<ol style="list-style-type: none">1. Wear mask with filter function.2. In case of emergency, use the positive pressure mode air breathing apparatus.■ Hand Protection : Wear protective gloves.■ Eye Protection : Wear safety goggles.■ Skin and Body Protection : Wear protective clothing include boots, gloves, lab coat, apron or overalls to prevent skin contact.			
Hygiene measures : <ol style="list-style-type: none">1. Remove contaminated clothes, clean thoroughly before reuse or disposal. Must advise the danger to the laundry worker.2. Wash hands thoroughly after handling this substance.3. Maintain a clean work environment.			

Section 9 - Physical & Chemical Properties

Appearance : white or colorless crystal, white crystal like powder	Odor : odorless
Color : Transparent	Melting Point: 153 °C
pH value : 1.85(25°C)	Boiling point/boiling range : 175°C
Flammability: --	Flash point : --
Decomposition temp : --	Test method : --
Auto ignition temp : 1010°C (powder)	Explosion properties : --
Vapor pressure : --	Vapor density : --
Density : 1.665 g/cm ³	Solubility : 133 g/100 ml (20°C)
log Kow : -1.72	Evaporation Rate : --

Section 10 - Stability & Reactivity Data

Stability : stable
Possible hazardous reactions under specific conditions : No reaction
Conditions to avoid : Heat, fire, source of ignition, dust and incompatible
Materials to avoid : Metal, oxidizer, base, reductant
Hazardous decomposition products : May generate CO and CO ₂ with thermal decomposition.

Section 11 - Toxicological Information

Route of exposure : Inhalation, skin contact, ingestion, eyes.
Symptoms : Inflammations, itchy, cough, nausea, vomit, diarrhea.
Immediate Toxicity :



Material Safety Data Sheet

Rev. 4

Page 4 of 5

1. Skin : Mild skin irritation with the symptoms of inflammations, itchy, pain.
2. Inhalation : Cause irritation of the respiratory tract with the symptoms of coughing, asthma.
3. Eye : irritation may cause eye damage.
4. Ingestion :
 - 4.1 Cause nausea, vomit diarrhea, Hematemesis.
 - 4.2 Swallow in large amount may cause
 - LD₅₀: 3000gm/kg (Rat, Oral)
 - LC₅₀: --

Specific effects : --

Section 12 - Ecological Information

Ecotoxicology :

- LC₅₀(fish) : 440-760 mg/l/96 h(IUCLID)
- EC₅₀(Aquatic Invertebrates) : ~120 mg/l/72 h(IUCLID)
- Bioconcentration factor (BCF) : --

Persistence and degradability : --

- Half-Life (Air) : --
- Half-Life (Water surface) : --
- Half-Life (Groundwater) : --
- Half-Life (Soil) : --

Bioaccumulative potential : --

Mobility in soil : --

Other adverse effects : --

Section 13 - Disposal Considerations

Methods of disposal : Follow the local government laws and regulation

Section 14 - MSDS Transport Information

UN classification number : --

Proper D.O.T Shipping Name : --

Hazard Class : --

Packing Group : --

Marine pollution : --

Specific precautionary transport measures and conditions : --

Section 15 - Regulatory Information

Regulations :

1. Enforcement Rules of the Labor Safety and Health Act
2. Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials
3. Toxic Chemical Substances Hazard Prevention and Response Plan Regulations



Material Safety Data Sheet

Rev. 4

Page 5 of 5

- | |
|---|
| 4. Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace |
| 5. Road Traffic Safety Regulations |
| 6. Industrial Waste Storage and Disposal Regulations and Facility Standards |

Section 16 - Other Information

Literature references	1. MSDS database from Merck Index 2. Chemical Hazards Chinese Database, Ministry of Labor	
Prepared by	Supplier : San Fu Chemical Co., Ltd.	
	Address : 340 Hsiao Hsin Li, Shan-Hua District, Tainan City, Taiwan, R.O.C.	
	Supplier's phone : 886-6-5837608	Supplier's FAX : 886-6-5839498
	Name : Edward Zhuang	
Issue date	Jun-28th 2014	Revision : 4
Re-revision date	Jun-27th 2017	
Remarks	Symbols Explanations: "--" No information is available at this time. "/" Not applicable to this substance.	
■ This information above has consulted national or international papers and manufacturer or supplier's provided information. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Users should make their own determination of the suitability of the information for their particular purposes.		