



交大瑞森渭南化学工业有限责任公司
JIAODA RISING WEINAN CHEMICAL INDUSTRIAL CO., LTD.

Add: Liangshuiqiao, Dongguan, Weinan City, Shaanxi, 71400, China

E-mail: sales@fumaric-acid.com

TECHNICAL DATA SHEET

TO:

DATE: OCT. 12, 2010

COMMODITY: FUMARIC ACID
BATCH SIZE: 21MT
SHELF LIFE: 2 YEARS
PACKING: 25KGS/BAG
REFERENCE STANDARD: FCCIV

SPECIFICATION	STANDARD (FCCV)
APPEARANCE	WHITE FINE POWDER
ASSAY	99.5%---100.5%
ARSENIC(As)	1PPM MAX
LEAD	2PPM MAX
RESIDUE ON IGNITION	0.1% MAX
MOISTURE	0.5% MAX
COLOUR(Pt-Co)	15# MAX
MALEIC ACID	0.1% MAX
MELTING POINT	286-302 °C

APPLICATION: FOOD ADDITIVES

RECOMMENDED STORAGE CONDITIONS:

STORE IN A DRY, COOL AND VENTILATED WAREHOUSE, KEEP AWAY OF MOISTURE, FURTHERMORE, IT SHOULD BE STORED SEPARATELY FROM POISONOUS SUBSTANCES.

JIAODA RISING WEINAN CHEMICAL INDUSTRIAL CO., LTD.

For and on behalf of
NINGBO TRUST PHARMA CO., LTD.
宁波保税区鹿氏国际贸易有限公司

Authorized Signature(s)

JIAODA RISING WEINAN CHEMICAL INDUSTRIAL CO., LTD

MATERIAL SAFETY DATA SHEET**Fumaric Acid****SECTION1 PRODUCT AND COMPANY IDENTIFICATION**

Product name: Fumaric Acid
Company: JIAODA RISING WEINAN CHEMICAL INDUSTRIAL CO., LTD
Address: Liangshuiqiao, Dongguan, Weinan City, Shaanxi Province, 714000, P. R. China
E-mail: safes@fumaric-acid.com
Fax: 86-913-2196628
Emergency Phone: 86-913-8152000
MSDS Number: 08-408
MSDS Date: Sep. 11, 2008

SECTION2 INFORMATION ON INGREDIENTS

Product name:	Ingredient	Concentration	CAS No.	EC No.
Fumaric Acid	Fumaric Acid	≥99.5%	110-17-8	203-743-0

SECTION 3 HAZARDS IDENTIFICATION

Hazards Identification: This substance is considered to be non-hazardous for transport.
Emergency Overview: Irritant. Irritating to eyes, respiratory system and skin.

SECTION4 FIRST-AID MEASURES

Skin Exposure: In case of contact, immediately wash skin with soap and copious amounts of water. If irritation persists, call a physician.
Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician immediately.
Inhalation Exposure: If inhaled, remove to fresh air. If necessary, get medical attention.
Oral Exposure: If swallowed, immediately wash out mouth with water provided person is conscious. Call a physician.

SECTION5 FIRE FIGHTING MEASURES**Extinguishing Media:**

Suitable: Water spray, Dry chemical, Carbon dioxide or appropriate foam.

Firefighting:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Procedures of Personal Precautions:

Exercise appropriate precautions to minimize direct contact with skin and eyes.

Methods for cleaning up:

Sweep up with spade and transfer to a dry, clean, lidded container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION 7 HANDLING AND STORAGE

Handling:

Wear appropriate protective clothing and gloves. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust required. Keep away from ignition sources, heat and flame. Incompatibilities: strong oxidants, amines, strong bases and foods. No smoking at working site.

Storage:

Store in a cool, well-ventilated area. Keep away from ignition sources, heat and flame. Store in a tightly closed container. Incompatibilities: strong oxidants, amines, strong bases and foods.

SECTION 8 EXPOSURE CONTROL/PPE

Engineering Controls: Use ventilation equipment if available. Safety shower and eye bath.

Personal Protective Equipment:

Respiratory: Wear dust mask.

Eye: Wear chemical safety goggles.

Clothing: Wear appropriate protective clothing.

Hand: Wear compatible protective gloves.

Other Protect: No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:	White crystalline powder		
Odor:	Weak odor		
Molecular Formula:	$C_4H_4O_4$	Molecular Weight:	116.07
MP/MP Range:	>300°C	pH value:	2.3
Solubility:	Weak soluble in water		

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Materials to Avoid: Strong oxidants, amines, strong bases.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicity Data: Rat Oral LD₅₀ 9300mg/kg.

Irritation Data: Irritating to eyes, respiratory system and skin.

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity Effects:**

Toxicity to fish: mortality – Brachydanio rerio (zebra fish) – 245mg/L-48h Method: DIN 38412

Toxic to daphnia and other aquatic invertebrates: EC₅₀ – Daphnia magna (Water flea) – 73.6mg/L – 24h Method: DIN 38412

Toxic to algae: Growth inhibition EC₅₀ – Scenedesmus subspicatus – 41mg/L – 72h

SECTION 13 DISPOSAL CONSIDERATIONS**Appropriate Method of Disposal of substance:**

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14 TRANSPORT INFORMATION**DOT**

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

ADR/RID Class: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

IMO

Non-Hazardous for Sea Transport: Non-hazardous for sea transport.

UN Number: None**SECTION 15 REGULATORY INFORMATION****EU DIRECTIVES CLASSIFICATION**

Symbol of Danger: Xi

Indication of Danger: Irritant

R: 36/37/38

Risk Statements: Irritating to eyes, respiratory system and skin.

S: 2.26

Safety Statements: Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SECTION 16 OTHER INFORMATION

Date: Sep. 11, 2008

Department: Shanghai Research Institute of Chemical Industry Testing Center
Shanghai Classification and Testing Centre of Dangerous Chemical for State Work Safety
Tel(Fax): 8621-52815377/52800971/52807275/52811034

Revision: 0

Other Information

The MSDS is prepared in accordance with ISO 11014-1:1994.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make 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 way shall we 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 from using the above information.