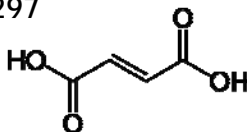


FUMARIC ACID - FOOD GRADE

Chemical Formula : C₄H₄O₄
 Molecular weight : 116.1
 CAS Registry Number : 110-17-8
 E. Number : 297
 Molecular Structure :



Description: Fumaric Acid is found abundantly in nature. Fumaric Acid has a slight acid taste. It is free flowing, stable and non-hygroscopic.

Reach Registration Number:

01-2119485492-31-0003

License under FSSA Act, 2006 Number:

10012042000166

U.S.FDA Registration Number:

13392034936

Grades of Granularity:

Powder:

99 % Min. Passing through USS 20 mesh

60 % Max. Passing through USS 120 mesh

SPECIFICATIONS: (Conforms to FCC 13)

Characteristics	Unit	Guaranteed		Typical
Appearance	-	White Crystalline Powder		
Odour	-	No odour	No odour	
Infrared Absorption	The spectrum of the sample exhibits maxima at the same wavelengths as those in the spectrum of the Reference standard.		Conforms	
Assay on dry basis	Wt. %	Min	99.5	99.7
Maleic acid	Wt. %	Max	0.05	0.03
Residue on Ignition (Sulfated Ash)	Wt. %	Max	0.10	0.02
Loss on Drying	Wt. %	Max	0.25	0.20
Colour (5% Alcohol Solution)	APHA	Max	20	15
Heavy metals (pb)	PPM	Max	5.0	<5
Lead (as pb)	PPM	Max	2.0	<2
Arsenic (as As)	PPM	Max	1.0	<1
Solubility in Water at 30 ^o C,	(g/ 100 ml)	-	0.7	0.7

PACKAGING:

1. PE lined, PE laminated HDPE bag - 25 Kg 2. PP laminated 4 ply Paper Bag - 25 Kg 3. Bulk Bags - 1000 / 675 / 500 Kg 4. Bulk Bags - Antistatic	Full Container Load (FCL): Palletized and Stretch Wrapped 1. Packed in 25 Kg HDPE / Paper Bags 1.0 MT X 4 Pallets and 1.125 MT X 16 Pallets = 22 MT / FCL 2. Packed in Bulk Bags a. 1000 Kg X 20 Bulk bags = 20 MT / FCL b. 500 Kg X 40 Bulk bags = 20 MT / FCL c. 675 Kg X 30 Bulk bags = 20.25 MT / FCL
Full Container Load (FCL): Palletised and Stretch Wrapped Packed in 25 Kg HDPE / Paper Bags 40 X 25 Kg Bags / Pallet = 1.0 MT 44 X 25 Kg Bags / Pallet = 1.1 MT 45 X 25 Kg Bags / Pallet = 1.125 MT	

Legislation:

1. The Food and Drug Administration of India have approved Fumaric Acid for use in the food products under Food Safety and Standards Act, 2006.
2. Fumaric Acid has been accorded Generally Recognised As Safe (GRAS) status by Food & Drug Administration of USA.
3. Joint Expert Committee on Food Additives of FAO, Rome and WHO, Geneva has given approval for use of Fumaric acid in Food Products.
4. Various tests conducted by different health bodies have cleared Fumaric acid as being safe for human beings.
5. Thirumalai Chemicals - Fumaric Acid (E-297) Complies to Specification with the current edition of Food Chemical Codex & EU-1333/2008
6. It is produced in accordance with

FSSC 22000 and it complies with the provision of the Commission Regulation (EC) No 231/2012 laying down specifications for food additives listed above.

FAMI-QS Code of Practice for Feed Additive and Premixture Operators and it complies with Regulation (EC) No 1831/2003 for additives used in animal nutrition. Category: Technological Additives (cat.1), Functional Group: Preservatives (a).

Storage & Handling:

1. Fumaric Acid is slightly inflammable. It should be stored away from sources of ignition. The packed bags shall be kept under shade, dry, and protected from rain. While handling Fumaric acid Safety Goggles, Dust Respirator and Rubber Gloves are recommended.
2. Shelf Life: 24 months from the date of production under recommended storage conditions.

Intended Use:

1. Fumaric Acid can replace traditional acidulants in the preparation of fruit juice drinks at substantial material and cost savings.
2. In Pharmaceutical industry, Fumaric Acid finds a major use for Ferrous Fumarate. Fumaric acid is used extensively in the feed to pigs.
3. Authorized to be used in Poultry and pigs; Young animals fed with milk replacers; Other animal species

For further details please contact

Thirumalai Chemicals Limited

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Website: <http://www.thirumalaichemicals.com>

The present product data sheet has the purpose of inform the clients on the quality of our product. The data herein is based on our present best knowledge. For a better suitability of the product for your particular purpose, tests are recommended prior product use. Our clients must be sure that the present data sheet hasn't been changed or replaced by a newer edition.
