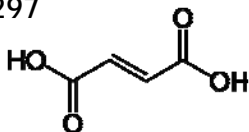


## FUMARIC ACID - FOOD GRADE

Chemical Formula : C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>  
 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: (Conform to FCC10)

Characteristics	Unit	Guaranteed		Typical
Appearance	-	White Crystalline Powder		
Odour	-	No odour		No odour
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	0.05	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	<5
Lead (as pb)	PPM	Max	2	<2
Arsenic (as As)	PPM	Max	1	<1
Solubility in Water at 30 <sup>0</sup> 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	<p><b>Full Container Load (FCL):</b>                  Palletised and Stretch Wrapped</p> <p>1. Packed in 25 Kg HDPE / Paper Bags                  1.0 MT X 4 Pallets and                  1.125 MT X 16 Pallets = 22 MT / FCL</p> <p>2. Packed in Bulk Bags</p> <p>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</p>
<p><b>Full Container Load (FCL):</b>                  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</p>	

### Legislation:

1. Fumaric Acid has been approved by the Food and Drug Administration of India 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.

### 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.

For further details please contact  
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Website: <http://www.thirumalaichemicals.com>

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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.

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