

**Description: Chemical Formula - C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>O**

**Phthalic Anhydride** is an important aromatic di-carboxylic acid anhydride, which is widely used in the manufacture of Alkyd Resins for Paints, Inks and Coatings, Unsaturated Polyester Resins, Plasticizers and Pigments.

**Specification:**

Characteristics	Guaranteed		Typical
	Appearance	White Flakes	
Purity, Wt. % (Gas Chromatography)	Min.	99.8	99.9
Maleic Anhydride, Wt. %	Max.	0.05	0.02
Solidification Point, Deg. C	Min.	130.8	130.8
Melt Colour, APHA	Max.	20	10
Heat Stability, APHA	Max.	50	30

**Packaging:**

1. HDPE Laminated Bags - 25 Kg
2. Bulk Bags - 1000 / 750 / 600 / 500 Kg

**Full Container Load (FCL):**
**1. Loose stuffing of 25 Kg Bags**

840 x 25 Kg Bags = 21 MT/ FCL

**2. Palletised & Stretch Wrapped**

40 x 25 Kg Bags / Pallet = 1.0 MT

36 x 25 Kg Bags / Pallet = 0.9 MT

a) 1.0 MT x 18 Pallets = 18 MT/ FCL

b) 0.9 MT x 20 Pallets = 18 MT/ FCL

c) 1.0 MT x 10 Pallets and  
0.9 MT x 10 Pallets = 19 MT/ FCL

d) 1.0 MT x 16 Pallets and  
0.9 MT x 4 Pallets = 19.6 MT/ FCL

**3. Bulk Bags**

a) 1000 Kg x 10 and 750 Kg x 10 bulk  
bags on Pallets = 17.5 MT/ FCL

b) 600 Kg x 30 bulk bags on Pallets  
= 18 MT/ FCL

c) 500 Kg x 30 bulk bags on Pallets  
= 15 MT / FCL

d) 500 Kg x 38 bulk bags on Pallets  
= 19 MT / FCL

**For further details please contact  
Thirumalai Chemicals Limited**

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## Health Hazard

Phthalic Anhydride is not poisonous. However, inhalation, or prolonged exposure must be avoided. Its dust irritates the mucous membrane. It is recommended to wear Safety Goggles, while handling this material.

## Fire and Explosion Hazard

Phthalic Anhydride whether molten or solid is an inflammable material and its dust and vapours can form explosive mixture, when in contact with air. It is essential to store or handle the material in a well-ventilated area away from any source of ignition.

## Storage

Phthalic Anhydride should be stored in cool, properly covered, dry area, away from direct sunlight. It should not be exposed to rain/ humidity as this leads to formation of Phthalic Acid, which is insoluble in Benzene and lowers the Melting Point.

## Typical Reactions, Products and Applications

Phthalic Anhydride		Products		Applications
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Maleic Anhydride Glycol, Styrene	Π	Unsaturated - Polyester Resins	Π	Reinforced Plastics Paints
Adipic Acid, Oxo-Alcohol (C <sub>4</sub> -C <sub>10</sub> )	Π	Esters	Π	Plasticizers for PVC, Cellulose, Resins & Cellophane
Urea, Copper	Π	Phthalocyanines	Π	Paints, Dyes, Plastics, Printing Inks
Poly-Alcohols Fatty Acids	Π	Alkyd Resins	Π	Paints, Varnishes Printing Inks
Benzene	Π	Anthraquinone	Π	Dyes
Ammonia	Π	Phthalonitrile Phthalimide	Π	Insecticides Pharma Products