



MALEIC ANHYDRIDE

Anhydride of Maleic acid

Description:	It is obtained as a by-product from the production of Phthalic Anhydride. CAS № 108-31-6
Use:	It is used for production of polyester resins, alkyd resins, lubricating oil additives, water treatment chemicals, detergents, pharmaceuticals and copolymers, chemical preparations for the agriculture, for obtaining of fumaric acid.
Classification:	Meets the requirements of the Bulgarian legislation.

CHARACTERISTICS

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Appearance: (visually)	
- liquid:	Homogeneous, clear liquid, without visible mechanical impurities
- solid:	White crystalline substance in the shape of long, needle-shaped crystals with silky lustre
Melting interval	
- beginning of the melting:	min 50°C
- end of the melting:	max 54°C
(with apparatus HWS-SG-2000)	
Colour of the melt from Maleic Anhydride after Platinum-Cobalt scale	
- in production:	max 40
- in storage:	max 110
(ASTM D 3366-80)	
Odour:	Sharp, irritating
Boiling point:	Around 200°C (sublimates)



Ignition temperature:	70°C
Explosion limits:	Lower - 1,4 Vol. % Upper - 7,1 Vol. %
Solubility:	It slightly dissolves in cold water, easier in hot water, as it turns into Maleic acid.
Handling the product:	<ul style="list-style-type: none">• Ensure full hermetic conditions of the equipment and local aspiration, when working with Maleic Anhydride;• Immediately change the contaminated clothes or shoes, in order to avoid corrosion, caused by Maleic acid;• Do not eat or drink at the workplace;• Observe the fire safety precautions, don't smoke;• Do not pollute the environment.
Storage:	<p><u>Storage temperature:</u> Liquid – from 55 to 65°C Solid – from 15 to 25°C</p> <ul style="list-style-type: none">• The liquid Maleic Anhydride is stored in tanks, made of stainless steel, in which constant temperature is maintained, under Nitrogen pillow;• Store in sheltered, dry and fireproof warehouses, protected from direct sunlight and heating appliances!• Keep out of the reach of children and other unauthorized persons!• Do not store together with foodstuff or fodder! <p>Shelf life: unlimited if the storage conditions are observed.</p>
Protection of the environment:	<ul style="list-style-type: none">• Protect from pollution the soil, water courses, reservoirs, drains and purifying equipment;• Any residues of the product, residues of its application and the respective packages, in which it has been kept, should be disposed of in accordance with local regulations for processing of special and dangerous waste.



Ruse Chemicals

Hygiene and safety work:

- The product is harmful. It irritates the eyes, upper respiratory tract and skin;
- The prolonged contact with Maleic Anhydride causes headache, dizziness, irritation of the upper respiratory tract;
- The irritating activity, caused by inhalation of vapours, may lead to bronchial asthma, especially in people, susceptible to it or who have previously had asthmatic complaints.
- May cause dermatitis, severe irritation in the stomach and gastrointestinal disorders;
- Vapours may cause severe irritation of eyes, acute conjunctivitis, and in case of a prolonged exposure – burning may result.
Admissible concentration limit: 1 mg/m³;
- Causes burns. Avoid direct contact with the product!
- Dust, as well as vapours of Maleic Anhydride, together with the air form explosive mixtures. The danger of auto-ignition may be avoided, using inert gas and wetting the dust;

If necessary – refer to the Material Safety Data Sheet.

The present technical description has the purpose to inform the clients on the quality of our product. The data herein is based on our present best knowledge. We invite our clients before work to check the quality of the product or its adaptation to the base and to make an experimental application. Our clients must be sure, that the present technical description hasn't been changed or replaced by a newer edition.
