



## PHTHALIC ANHYDRIDE

### Anhydride of Phthalic acid

<b>Description:</b>	It is white crystal substance in the form of long needle-like crystals with silky gloss. CAS № 85-44-9 It is obtained after a vapour-phase oxidation of ortho-xylene with the air on Divanadium-5-oxide catalyst.
<b>Use:</b>	It is used as a raw material in the production of Alkyd resins, Polyester resins, plasticizers, for synthetic anthraquinone and its derivatives, in the production of Rodamine Phthalocyanic colorants, for insecticide preparations, in the pharmaceutical industry.
<b>Classification:</b>	Meets the requirements of the Bulgarian legislation.

## CHARACTERISTICS

INDEXES	NORM
<b>Appearance:</b> (visually)	Flakes, melt
<b>Colour:</b> (visually)	White
<b>Phthalic Anhydride content:</b> (gas-chromatographic analysis)	min 99,80 %
<b>Melting interval</b> - <b>Beginning of the melting:</b> - <b>End of the melting:</b> (with apparatus HWS-SG-2000)	min 130,8 °C max 133,0 °C
<b>Free-acids content:</b> (titrimetrically)	max 0,1 %



# Ruse Chemicals

**Colour of the melt from Phthalic Anhydride after Platinum-Cobalt scale:** max 20  
(ASTM D 3366-80)

**Thermostability at (250±2)°C/90 min after the Platinum-Cobalt scale:** max 40  
(ASTM D 3366-80)

**Odour:** Severe, irritating

**Boiling point:** 285 °C (sublimates)

**Ignition temperature:** 152 °C

**Explosion limits:** 1,7 - 10,5 volume %

**Solubility:**

- It slightly dissolves in cold water, easier in hot water, as it turns into Phthalic acid;
- It dissolves in ethanol and ester.

**Handling the product:**

- Ensure full hermetic conditions of the equipment, when working with Phthalic Anhydride, and in the places, where dust may occur – provide local aspiration;
- Wear gas-masks in the working places, where dust, as well as vapours of Phthalic Anhydride may form;
- Change immediately the contaminated clothes or shoes, in order to avoid corrosion, caused by Phthalic acid;
- Don't eat or drink on the working place;
- Follow the fire safety precautions, don't smoke;
- Don't pollute the environment.

**Package:**

- Packages of polypropylene of net weight of 25 kg;
- Polypropylene containers of net weight of 500 kg, 1000 kg.



# Ruse Chemicals

## Storage:

Storage temperature – up to 65<sup>0</sup>C.

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!

Don't store together with foodstuff or fodder!

Shelf life: unlimited, if the storage conditions are observed.

## Protection of the environment:

- Protect from pollution the soil, water resources, 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 according to the local regulations for processing of special and dangerous waste.

## Hygiene and safety work:

- The product is harmful. It irritates eyes, respiratory system and skin;
- More prolonged contact of a moist tissue with solid Phthalic Anhydride may cause burning;
- In case of a repeated touch inflammation of the skin and chronic disorder of the eyes may raise;
- 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.

Admissible concentration limit: 6 mg/m<sup>3</sup>;

- Avoid direct contact with the product!
- Dust, as well as vapours of Phthalic 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.

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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.

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