

Technical data sheet

Phthalic anhydride (PA)

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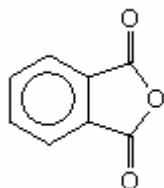
Synonyms

Phthalic acid anhydride; 1,2-Benzenedicarboxylic anhydride; 1,3-Phthalandione; o-Phthalic acid anhydride; 2-Benzofuran-1,3-dione.

Formula

$C_8H_4O_3$

Structural formula



Molecular weight: 148.1 g/mol

CAS number

85-44-9

EINECS number

201-607-5

Product specification

Characteristics	Unit	Value	Method*	Reference
Purity	%	99.7 min	L001	
Maleic anhydride content	%	0.05 max	G008	
Solidification point	°C	130.8 min	GM013	ASTM D-1493
Colour in molten state	Hz	20 max	GM011	ASTM D-3366
Stability (90 min @ 250°C)	Hz	60 max	GM011	ASTM D-3366
Ash	ppm	50 max	GM015	ASTM D-482
Iron	ppm	3 max	L004	
Benzoic acid content	%	0.2 max	GM001	AI102
Phthalic acid content	%	0.2 max	L002	
Benzene solution		Clear or slightly opalescent	L026	

Typical properties

Characteristics	Unit	Value
Boiling point	°C	284
Density @ 150°C (molten)	g/ml	1.197 g/ml
Bulk density	Kg/l	0.7 ÷ 0.8
Vapour pressure @ 134 °C	mmHg	10.0
Viscosity @ 134°C	mPa.s	1.19

Main applications

PA is a chemical intermediate mainly required for the manufacture of:

- Phthalate Plasticizers
- Unsaturated Polyester Resins (U.P.R.)
- Alkyd Resins for Paints and Varnishes
- Polyester Polyols
- Allyl Resins
- Pigments and Dyes
- Agrochemicals

Handling

Packaging: PA is available both in molten form (heated tanks) and flakes packaged in:
- 25 kg polyethylene bags;
- 500/750/1000 kg big bags.
Other sizes in weight are available upon request.

Storage: it must be kept away from open flames, other potential ignition sources and powerful oxidizing agents in cool, dry, well-ventilated place and protected from light and moisture.

Shelf life: 12 months from production date.

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