

Technical Information

TI/N-CPN/IP Palatinol® DOTP
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Petrochemicals Plasticizers



Palatinol® DOTP

Palatinol® DOTP is used primarily to plasticize vinyl resin where good processing characteristics are needed and the finished product requires improved low temperature flexibility and low volatility.

Chemical Nature

Bis(2-ethylhexyl) terephthalate

BASF Registered Name

Palatinol® DOTP

CAS No.

6422-86-2

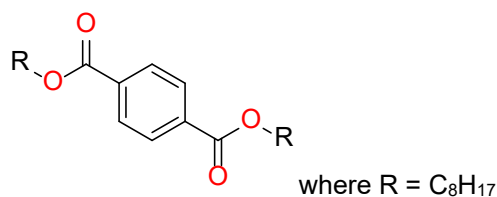
Molecular Weight

391

Formula

C₂₄H₃₈O₄

Molecular Structure



Product Specifications

	Value	Test Method
Specific gravity @ 20°/20 °C	0.983 - 0.989	ASTM D-4052
Specific gravity @ 25°/25 °C	0.980 - 0.987	ASTM D-4052
Ester content, % by weight (minimum)	99.6	ASTM D-3465
Acid Number, mg KOH/g (maximum)	0.1	ASTM D-1045
Water, % by weight (maximum)	0.1	ASTM E-203
Color, Pt-Co Units (APHA, maximum)	25	ASTM D-5386
Suspended Matter	COLSFFM*	visual

*Clear Oily Liquid Substantially Free of Foreign Material

Typical Physical Properties

The following data were measured in the BASF Corp. laboratory. They do not represent any legally binding guarantee of properties for our sales product.

	Value
Pour point, °C	< -45
Flash point (COC), °C	232
Odor	mild characteristic
Surface Tension, mN/m	32.3
Solution Temperature, °C	146
Plastisol Gelation Temperature, °C	136
Vapor Pressure @ 20 °C, mbar	< 0.01
Solubility @ 25 °C in water, mg/L	< 0.01
Refractive Index ⁿ D20	1.488

Viscosity & Density Data

Temperature (°C)	Dynamic viscosity (cP)	Density (g/cm ³)
-20	2,880	1.012
-10	961	1.005
0	377	0.997
10	170	0.990
20	86	0.982
40	29.5	0.968
60	13.2	0.953
80	7.3	0.938

Description

Palatinol® DOTP is a plasticizer based upon 2-Ethylhexanol. It is compatible with both homopolymer and copolymer vinyl resins. Palatinol® DOTP is used primarily to plasticize vinyl resin where good processing characteristics are needed and the finished product requires improved low temperature flexibility and low volatility.

The addition of Palatinol® DOTP to plastisols and organosols lowers initial viscosity and leads to longer shelf life.

Applications

Palatinol® DOTP is recommended for use in select consumer goods, film & sheet, coated fabrics, flooring, wall coverings and wire & cable.

Safety

Palatinol® DOTP does not require special handling. Handle in accordance with good industrial hygiene and safety practices. Avoid eye contact by wearing personal protective equipment. If eye contact occurs, wash with flowing water and contact physician.

Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation.

Always refer to the Safety Data Sheet (SDS) for detailed information on safety.

Storage and Handling

Palatinol® DOTP can be stored for one year at temperatures below 40°C, if moisture is excluded.

Packaging

Palatinol® DOTP is available in bulk, tank trucks or rail cars.

Contact Information**Marketing**

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Note

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