Technical Information

TI/N-CPN/IP Palatinol® 810TM June 2025

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Petrochemicals Plasticizers



Palatinol® 810TM

Palatinol® 810TM is a primary plasticizer for polyvinyl chloride resins and copolymers. It offers a unique combination of easy processability, a high degree of permanence and good compatibility.

Chemical Nature 8-10 Linear Trimellitate

Palatinol® 810TM **BASF Registered Name**

CAS No. 68130-50-7 (U.S. & Canada) 90218-76-1 (other regions)

Average Molecular Weight 591

Molecular Structure

where R, R' and R" can be C_6H_{13} , C_8H_{17} or $C_{10}H_{21}$

Product Specifications

	Value	Test Method
Specific gravity @ 25°/25 °C	0.970 - 0.978	ASTM D-4052
Ester content, % by weight (minimum)	99.0	ASTM D-3465
Acid Number, mg KOH/g (maximum)	0.1	ASTM D-1045
Water, % by weight (maximum)	0.1	ASTM E-1064
Color, Pt-Co Units (APHA, maximum)	100	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	-44
Flash point (COC), °C	266
Odor	mild characteristic
Surface Tension, mN/m	31.6
Solution Temperature, °C	154
Plastisol Gelation Temperature, °C	159
Vapor Pressure @ 20 °C, mbar	< 0.01
Solubility @ 25 °C in water, mg/L	< 0.01
Refractive Index ⁿ D20	1 481

Viscosity & Density Data

Dynamic viscosity (cP)	Density (g/cm³)
3,066	1.004
1,168	0.996
515	0.989
253	0.981
137	0.974
49.7	0.963
22.6	0.946
12.1	0.931
	3,066 1,168 515 253 137 49.7 22.6

Description

Palatinol[®] 810TM, 6-8-10 linear Trimellitate (8-10 rich), is a primary plasticizer for polyvinyl chloride resins and copolymers. When compared to TOTM, formulations made with Palatinol[®] 810TM exhibit superior low temperature flexibility and resistance to oxidative degradation at high temperatures. This Trimellitate offers a unique combination of easy processability, a high degree of permanence and good compatibility.

Applications

Palatinol $^{\circ}$ 810TM is suggested for such applications as wire and cable insulation, refrigerator gaskets, where lacquer mar resistance is a factor, and very low fog automotive components.

Palatinol[®] 810TM is available stabilized (as Palatinol[®] 810TM-I) for electrical applications and where otherwise required.

Safety

Palatinol[®] 810TM 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[®] 810TM can be stored for one year at temperatures below 40°C, if moisture is excluded.

Packaging

Palatinol® 810TM is available in bulk, tank trucks or rail cars.

Contact Information

Marketing

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Note

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