

Technical Information

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

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Petrochemicals Plasticizers



Palatinol® 810TM-I

(Stabilized with 0.1 % 1,1,3-Tris(2-methyl-4-hydroxy-5-tert-butylphenyl)butane antioxidant)

Palatinol® 810TM-I 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

BASF Registered Name

Palatinol® 810TM-I

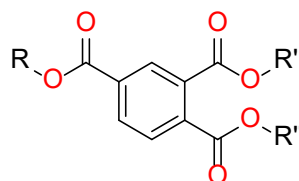
CAS No.

68130-50-7 (U.S. & Canada)
90218-76-1 (other regions)

Average Molecular Weight

591

Molecular Structure



where R, R' and R'' can be C₆H₁₃, C₈H₁₇ or C₁₀H₂₁

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	1.484

Viscosity & Density Data

Temperature (°C)	Dynamic viscosity (cP)	Density (g/cm ³)
-20	3,066	1.004
-10	1,168	0.996
0	515	0.989
10	253	0.981
20	137	0.974
40	49.7	0.963
60	22.6	0.946
80	12.1	0.931

Description

Palatinol® 810TM-I, 6-8-10 Linear Trimellitate (8-10 rich), is a primary plasticizer for polyvinyl chloride resins and copolymers. When compared to TOTM and TINTM, formulations made with Palatinol® 810TM-I 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.

Palatinol® 810TM-I is stabilized with 0.1% 1,1,3-Tris(2-methyl-4-hydroxy-5-tert-butylphenyl)butane.

Applications

Palatinol® 810TM-I 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-I is stabilized for electrical applications and where otherwise required.

Safety

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

Packaging

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

Contact Information

Marketing

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Note

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