



TRI OCTYL TRIMELLITATE (TOTM)

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Primary plasticizer for PVC and PVC copolymers

Chemical Nature

Trimellitic anhydride acid ester of C₈ alcohol

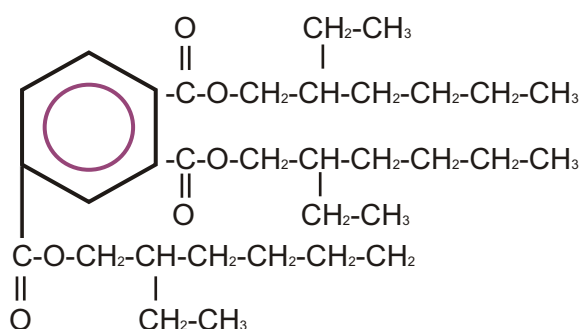
Chemical Name :- Tri (2-Ethylhexyl) Trimellitate

Trade Name :- TOTM, TEHTM

Molecular Formula :- C₃₃H₅₄O₆

Molecular Weight :- 546.9

Molecular Structure :- C₆H₃(COOC₈H₁₇)₃



CAS Number :- 3319-31-1

UN. NO :-

EINECS NO :- 222-020-0

Specification

Characteristics

Unit

Test Method

Value

| | | | |
|------------------------------|-----------|----------------|--------------|
| Colour | HU | ASTM-D-1045-86 | 50 max. |
| Volatile Loss (130°C/3Hrs) | wt. % | KLJTM | 0.10 max. |
| Ester Value | mg KOH/g | ASTM-D-1045-86 | 303-310 |
| Acidity | wt. % | ASTM-D-1045-86 | 0.030 max. |
| Moisture | wt. % | ASTM-E-203 | 0.10 max. |
| Specific Gravity (27°C) | - | ASTM-D-1045-86 | 0.985-0.995. |
| Ester content | wt. % | ASTM-D-1045-86 | 99.00 min. |
| Heat Stability (180°C/2Hrs) | HU | ISI-9591-96 | 65. |
| Acidity after heat treatment | wt. % | ASTM-D-1045-86 | 0.05. |
| Plasticizing Esters by GC | % by area | KLJTM | 99.00 min. |
| Residual alcohol | % by area | KLJTM | 0.10 max. |

Typical Properties

| | | | |
|-------------------------|-------|----------------|----------------------------|
| Volume Resistivity | Ohmcm | KLJTM | 5.0±1.0 X 10 ¹¹ |
| Boiling Point @ 7 mbar | °C | lit. | 283. |
| Pour point | °C | lit. | - 46. |
| Viscosity at 20°C | cp | KLJTM | 272-277. |
| Flash Point | °C | KLJTM | 250. |
| Refractive Index (27°C) | - | ASTM-D-1045-86 | 1.483-1.487. |

Total Solution in Plasticizers



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Properties

TOTM is almost colourless and oily liquid, free of foreign materials **TOTM** is a primary branched monomeric plasticizers for vinylhomopolymer and Copolymer resins. **TOTM** is suggested for use in those end-use areas where Extreme low volatility is required.

Application

TOTM provide desirable properties in vinyl applications which require good plasticizer / resin compatibility , low volatility , resistance to extraction by soapy water and good electrical properties.

TOTM is often a good substitute for polyester polymeric plasticizers where improvements in processing are desired.

TOTM is a specialty plasticizer that offers permanence, good extraction resistance, superior high temperature performance and excellent electrical properties.

Plasticizing Efficiency 1.17

Compatibility with Secondary Plasticizers

Very limited in comparison of DOP.

Packing & Storage

TOTM is packed in 200/225 kg iron drum / HDPE drum, 20 - 22 MT in Flexi tank / ISO tank / road tanker. It is stored in tightly closed container, in a cool, dry & ventilated area.

Shelf Life

Original characteristics remain intact for 24 months, if kept in recommended storage,

Safety

The MSDS can be provided on request.

Disclaimer

The data contained in this publication are based on our current knowledge and experience. During processing, there are so many factors which may affect the application part of **TOTM**, so these data neither imply any guarantee of certain properties, nor the suitability of the product for the specific purpose. Any data given in this publication may change without prior information and donot constitute the agreed quality of our product.