



## TRI-ISODECYL TRIMELLITATE (K-3001)

### TRI-ISODECYL TRIMELLITATE

Primary plasticizer for PVC and PVC copolymers

**Chemical Nature** Trimellitic ester of C<sub>10</sub> alcohol

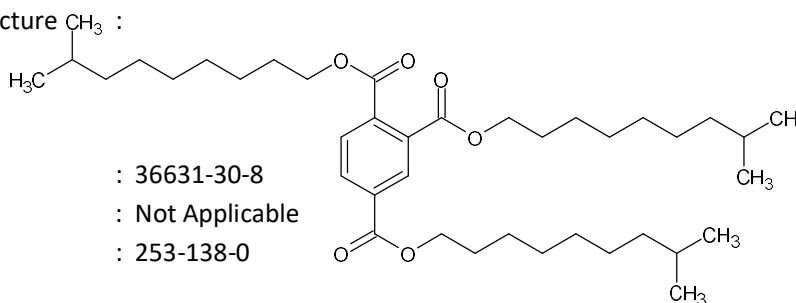
Chemical Name : Tri-isodecyl trimellitate

Trade Name : TIDTM | Kanatol - 3001

Molecular Formula : C<sub>39</sub>H<sub>66</sub>O<sub>6</sub>

Molecular Weight : 630.94

Molecular Structure CH<sub>3</sub> :



CAS No. : 36631-30-8

UN No. : Not Applicable

EINECS No. : 253-138-0

Specification	Characteristics	Unit	Test Method	Value
	Colour	HU	ASTM-D-1045-2008	Max. 50
	Volatile Loss (130°C/3h)	Wt. %	KLJ-TM-P-11-92	Max. 0.10
	Ester Value	mg KOH/g	ASTM-D-1045-2008	267-273
	Acidity	Wt. %	ASTM-D-1045-2008	Max. 0.03
	Moisture	Wt. %	ASTM-E-203-2008	Max. 0.10
	Specific Gravity (27°C)	---	ASTM-D-1045-2008	0.962 – 0.963
	Ester content	Wt. %	ASTM-D-1045-2008	Min. 99.00
	Heat Stability (180°C/2h)	HU	ISI-9591-2013	No change
	Plasticizing Esters by GC	Area %	KLJ-TM-P-12-98	Min. 99.00
	Residual Alcohol	Area %	KLJ-TM-P-12-98	Max. 0.10

### Typical Properties

Boiling Point	°C	---	335
Viscosity at 20°C	cP	KLJ-TM-P-13-97	490 ± 10
Flash Point	°C	KLJTM	215
Refractive Index (27°C)	--	ASTM-D-1045-2008	1.483 – 1.487

### Total Solution in Plasticizers



## TRI-ISODECYL TRIMELLITATE (TIDTM)

### Properties

**TIDTM** is a monomeric plasticizer useful in PVC and other chlorinated thermoplastic that must withstand a temperature of 105 °C.

**TIDTM** due to higher boiling point, it has the properties of zero volatility and no migration. It is extremely resistant to the aqueous agents, but quite sensible to the oils and hydrocarbons. We recommend blending with a polymeric plasticizer.

**TIDTM** is very stable to the action of chemical and external agents. For this reason, it does not produce yellowish in processing by effect of light.

**TIDTM** has high dielectric resistance. For this reason, it is an ideal plasticizer for electrical wire.

**TIDTM** has lower volatility and higher molecular weight than TM C9 and can be used as antifogging as does not reach 0.5 mg in the air.

### Application

**TIDTM** is used in applications in the thermoplastic industry, due to its properties like low volatile loss, low temperature performance, dielectric resistivity and fogging resistance. It is also a good plasticizer for acrylic emulsions and inks. Due its wide spectrum of temperatures is a substitute for others more expensive plasticizers. In the lubricants industry, it is highly valued for its low volatility, good thermal stability and good oxidation stability. Outstanding hydrolytic resistance that prevents the degradation of lubricants and the corrosion of metals. Additive in general in this sector. Conditioner for cosmetic.

### Packing & Storage

**TIDTM** is packed in 200/225 kg iron drum/ HDPE drum, 20–22 fcl flexi tank or in road tanker. It is stored in tightly closed container, in a cool, dry and ventilated area.

### Shelf Life

It keeps the original characteristics minimum 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 TIDTM, 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 do not constitute the agreed quality of our product.

[Total Solution in Plasticizers](#)