



KANATOL - 1001

DI ISO DECYL PHTHALATE

Primary plasticizer for PVC and PVC copolymers

Chemical Nature

Phthalic acid esters of C₁₀ alcohols.

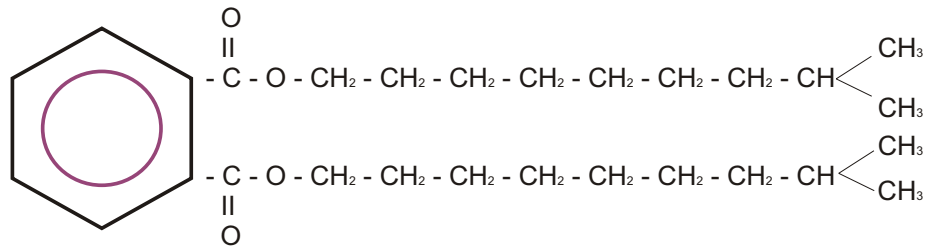
Chemical Name :- Di Iso Decyl Phthalate.

Trade Name :- KANATOL- 1001

Molecular Formula :- C₂₈H₄₆O₄

Molecular Weight :- 446

Molecular Structure :- C₆H₄(C₁₀H₂₁O₂)₂



CAS Number :- 68515-49-1

UN. NO :-

EINECS NO :-

Specification

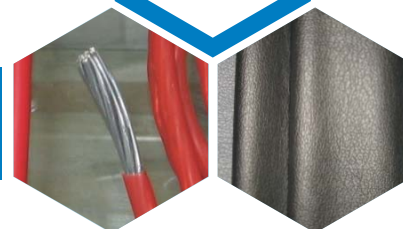
Characteristics

| Characteristics | Unit | Test Method | Value |
|------------------------------|-----------|----------------|--------------|
| Colour | HU | ASTM-D-1045-86 | 20 max. |
| Volatile Loss (130°C/3 Hrs) | wt..% | KLJTM | 0.10 max. |
| Ester Value | mg KOH/g | ASTM-D-1045-86 | 249–254. |
| Acidity | wt..% | ASTM-D-1045-86 | 0.010 max. |
| Moisture | wt..% | ASTM-E-203 | 0.10 max. |
| Specific Gravity (27°C) | - | ASTM-D-1045-86 | 0.960–0.967. |
| Ester content | wt..% | ASTM-D-1045-86 | 99.50 min. |
| Heat Stability (180°C/2 Hrs) | HU | ISI-9591-96 | No Change. |
| Acidity after heat treatment | wt..% | ASTM-D-1045-86 | 0.03. |
| Plasticizing Esters by GC | % by area | KLJTM | 99.50 min. |
| Residual alcohol | % by area | KLJTM | 0.10 max. |

Typical Properties

| | | | |
|-------------------------|-------|----------------|----------------------------|
| Volume Resistivity | Ohmcm | KLJTM | 4.5±1.0X10 ¹¹ . |
| Boiling Point @ 3.5mmHg | °C | lit. | 255. |
| Pour point | °C | lit. | -48. |
| Viscosity at 20°C | cp | KLJTM | 108 ± 2. |
| Flash Point (COC) | °C | KLJTM | 232. |
| Refractive Index (27°C) | - | ASTM-D-1045-86 | 1.483-1.486. |

Total Solution in Plasticizers



KANATOL - 1001

Properties

K-1001 is a clear, colourless, and odourless liquid, free of foreign materials. It is soluble in most organic solvent and in soluble in water.

Application

Around 95% of **K-1001** is used in PVC as a plasticizer. More than half of the remaining 5% is used in the production of polymers other than PVC (e.g. rubbers). The remaining **K-1001** used in non-polymer application including anticorrosion paints, anti-fouling paints, lacquers, inks, adhesives and sealants.

In wire and cable formulation **K-1001** finds wide use in 75°C THW building wire compounds and in 80°C and 90°C appliance wire insulation.

In plastisol application, **K-1001** provide good initial viscosities and Excellent viscosity stability.

Plasticizing Efficiency 1.10

Compatibility with Secondary Plasticizers

Very limited in comparison of DOP.

Packing & Storage

K-1001 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 **K-1001** 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.

Total Solution in Plasticizers