

# **KANATOL - 800**

# DI - OCTYL PHTHALATE (DOP)

# Primary plasticizer for PVC and PVC copolymers

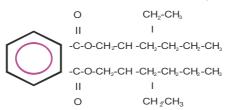
Chemical Nature Phthalic acid ester of C<sub>8</sub> alcohol

Chemical Name :- Bis (2- Ethylhexyl)Phthalate
Trade Name :- Formulated Plasticizer (K-800)

Molecular Formula :- C<sub>24</sub>H<sub>38</sub>O<sub>4</sub> Molecular Weight :- 390

Molecular Structure :-  $C_4H_9(C_2H_5)C_2H_3-CO_2-C_6H_4-CO_2H_9(C_2H_5)C_4H_9$ 

Unit



CAS Number :- 117-81-7 UN. NO :- 3082 EINECS NO :- 204211-0

# **Specification**

Colour	HU	ASTM-D-1045-86	20 max.
Volatile Loss (130°C/ 3Hrs)	wt.%	KLJTM	0.10 max.
Ester Value	mg KOH/g	ASTM-D-1045-86	284-290
Acidity	wt.%	ASTM-D-1045-86	0.01 max.
Moisture	wt.%	ASTM-E-203	0.10 max.
Specific Gravity (27°C)		ASTM-D-1045-86	0.980-0.986
Ester content	wt.%	ASTM-D-1045-86	99.50 min.
Heat Stability (180°C/ 2Hrs)	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.

**Test Method** 

# **Typical Properties**

**Characteristics** 

nmcm	KLJIW	2±0.2 X10 "
С	lit.	231
С	lit.	-46
;p	KLJTM	82 <u>+</u> 2
C	KLJTM	218
-	ASTM-D-1045-86	1.484-1.488
	C C p C	C lit. C lit. p KLJTM C KLJTM

## Total Solution in Plasticizers

Contact: plasticizer@kljindia.com

An ISO 9001:2000 and ISO 14001:2004 conglomerate

www. kljindia.com

**Value** 





### **KANATOL - 800**

### **Properties**

DOP is almost colourless and odourless oily liquid, free of foreign materials which is, slightly soluble in water( 0.285mg/L at 240c ) but soluble in alcohols, hexane etc. and is miscible and compatible with all the monomeric plasticizers of PVC compounding.

## KLJ advantages :-

- I) It is almost smellless.
- li) Its volume resistivity is much higher than any other DOP.
- lii) It has less volatility due to less % of moisture & residual alcohol.

## **Application**

95% of DOP is used as a Plasticizer in PVC resins for fabricating flexible vinyl Product like:- vinyl upholstery, tablecloth, shower, curtain, raincoat, shoes, garden hoses, swimming pools liners, polymeric coating, cable coating, component of paper & paperboard, defoaming agents, surface lubricants, in order of importance.

The only significant non-plasticizer use for DOP is an replacement for polychlrinated biphenyls in dielectric fuild for electric capacitors.

The micelleneous use for DOP are :- as the solvent in erasable ink, as an acaricide for use in orchards, as an inert ingredient in pesticides, as an vacuum pump oil, in detecting leaks in respirators.

Packing & Storage

DOP 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

**Shelf Life** 

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

**Safety** 

The MSDS can be provided on request.

**Disclaimer** 

The data contain in this publication are based on our current knowledge and experience. During processing, there are so many factors which may effect the application part of DOP, so these data neither imply any gaurante of certain properties, nor the sutability 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.

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