



## TRI CRESYL PHOSPHATE (TCP-40)

### TRI CRESYL PHOSPHATE (TCP-40) Phosphate plasticizer for PVC and PVC copolymers

#### Chemical nature

Phosphoric acid methylphenyl diphenyl ester

Chemical name :- TRI CRESYL PHOSPHATE-40 (TCP-40)  
 Trade Name :- TCP-40 %  
 Molecular Formula :- C<sub>19</sub>H<sub>17</sub>O<sub>4</sub>P  
 Molecular weight :- 340.31 g/mol  
 Molecular Structure :- N.A.

CAS Number :- 26444-49-5  
 UN. NO. :- 3082  
 EINECS NO. :- 247-693-8

Specification	Characteristics	Unit	Test Method	Value
	Appearance		Visual	Clear Liquid
	Colour	HU	ASTM-D-1045-86	150 max.
	Specific Gravity ( 25°C)	--	ASTM-D-1045-86	1.210 ± 0.010
	Acidity	wt. %	ASTM-D-1613	0.01 max.
	Moisture	wt. %	K.F ASTM-E-203-01	0.10 max.
	Free Alcohols	%	KOR/QCD/FP-3.4	0.05 max.
	Refractive Index (27°C)		ASTM - 1807	1.5500 - 1.5650
	Ester Content	%	GLC KOR/QCD/FP-4.7	99.00 min.
	Cresolic Ester Content	%	GLC KOR/QCD/FP-4.7	40.00 min.
	O-Isomer Content	%	GLC KOR/QCD/FP-4.7	0.50 max.
	Viscosity (cps) @ 25 °C	cps	Brook Field	40 - 55.
			ASTM D- 445	
	Water Soluble Impurities	ppm	BS :1998 :1970	10 max.
	p' Content	%	KOR/QCD/FP-3.8	8.90 - 9.10
	Refractive Index (27°C)	—	ASTM-D-1807	1.483 -1.528

#### Properties

TCP-40 is the most efficient plasticizer of the liquid tri aryl phosphate type. It is colourless to pale yellow liquid insoluble in water & soluble in benzene, toluene etc.

#### Total Solution in Plasticizers



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### Application

TCP-40 is mainly used as flame retardant recipe/s for many plastics & resins in the manufacturing of electrical & automobile parts.

TCP-40 are used as flame retardant plasticizer or additives in cellulose, polyester & polyurethane.

TCP-40 is used in conveyer belt as a flame retardant plasticizer.

TCP-40 is used in styrenic thermoplastics as an alternative to halogenated flame retardant.

### Packing & Storage

TCP-40 is packed in 50/250 kg HDPE carboy/drum, 20 - 22 FCL in ISO Tank/road tanker. It is stored in tightly closed container, in a cool, & dry, ventilated area.

### Shelf life

Original characteristics remain intact for a period of 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 TCP-40, 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.