

# PHOSPHATE ESTERS

PROPERTIES	GRADE	UNIT	TEST METHOD	KANATOL FLAMEGUARD C 100	KANATOL FLAMEGUARD C 70	KANATOL FLAMEGUARD C 40	KANATOL FLAMEGUARD P 100
				TRI CRESYL PHOSPHATE	TRI CRESYL PHOSPHATE-70	TRI CRESYL PHOSPHATE-40	TRI PHENYL PHOSPHATE
Appearance			Visual	Clear Liquid			White Crystalline Flakes
Colour (Max.)	Hazen	ASTM-D-1045-86	150	150	150	25	
Specific Gravity at 25°C	N/A	ASTM-D-1045	1.17 ± 0.001	1.19 ± 0.001	1.21 ± 0.001	1.208 (at 60°C)	
Refractive Index at 27°C	N/A	ASTM-1807	1.558 ± 0.008	1.558 ± 0.008	1.558 ± 0.008	—	
Moisture Content (Max.)	% By Weight	Karl Fischer ASTM-E-203-01	0.10	0.10	0.10	0.10	
Acidity as H <sub>3</sub> PO <sub>4</sub> (Max.)	% By Weight	ASTM-D-1613	0.01	0.01	0.01	0.01	
Free Alcohol (Max.)	% By Area	KLJ/QCD/WIN/46	0.05	0.05	0.05	0.05	
Ester Content (Min.)	% By Weight	GLC KLJ/QCD/WIN/50	99.00	99.00	99.00	99.00	
Cresolic Ester Content (Min.)	% By Area	GLC KLJ/QCD/WIN/50	99.00	70.00	40.00	—	
O-Isomer Content (Max.)	% By Area	GLC KLJ/QCD/WIN/50	0.50	0.50	0.50	—	
Viscosity at 25°C	cPs	Brookfield Viscometer ASTM-D-445	55 - 70	50 - 60	40 - 55	17.0 (at 60°C)	
Melting Point	°C	IS-5762 : 1970	—	—	—	47.5 - 49.5	
Water Soluble Impurities (Max.)	PPM	BS-1998 : 1970	10	10	10	10	
Phosphorous Content	%	KLJ/QCD/WIN/49	8.40 - 8.50	8.70 - 8.80	8.90 - 9.10	9.40 - 9.50	

RoHS : All above products are complying to RoHS requirements.

APPLICATIONS : Flame Retardant plasticizers for PVC | Synthetic Rubber | Cellulose Polymers | Photographic Film | Anti-foaming Agent for Paper Coating Compounds | Water Based Adhesives Inks and Detergents | Stabilizing Agent for Urethane Foam | Anti Wear Agent in Lubricating Oil | Additives for improving Binding Properties | Corrosion Resistant in Paints | Gasoline Additive as Lead Scavenger | Hydraulic Fluid - improves Heat Stability | Extraction Aid for Heavy Metals | Stabilizer for Aromatic Polyester | Solvent for Paints | Low Temperature Plasticizer, etc..