

SYNATIVE ES TMP 05/320

Composition

Trimethylolpropane-complex ester

Technical Data

Item	Value	Method / Remarks
Appearance:	Clear, yellow, high viscous liquid	
Flash Point:	min. 300 °C	DIN ISO 2592
Cloud Point:	max. -20 °C	DGF D-III 3 (74)
Pour Point:	max. -20 °C	DIN ISO 3016
Acid Value:	max. 1	DIN 53402 DGF C-V 2 (81)
Iodine Value:	85 - 95	DGF C-V 11 b
Hydroxyl Value:	max. 15	DGF C-V 17 a (53) DIN 53240
Saponification Value:	178 - 188	DGF C - V 3 (77) DIN 53401
Density: 15 °C	0,930 - 0,940 g/cm ³	DIN 53479
Viscosity: 40 °C	300 - 352 mm ² /s	DIN 51562
Color: Lovibond 1" gelb	max. 10,0	DGF C-IV 4 b (84)
Lovibond 1" rot	max. 1,5	

Quality Control Data

(These data are used for quality release and are certified for each batch.)

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Viscosity: 40 °C	300 - 352 mm ² /s	DIN 51562
Color: Lovibond 1" gelb	max. 10,0	DGF C-IV 4 b (84)
Lovibond 1" rot	max. 1,5	

Additional Specifications

(Guaranteed specification values which are not determined on a regular basis.)

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Flash Point:	min. 300 °C	DIN ISO 2592
Pour Point:	max. -20 °C	DIN ISO 3016
Density: 15 °C	0,930 - 0,940 g/cm ³	DIN 53479

Properties & Use

Synthetic lubricant basestock, e.g. for hydraulic fluids (ISO VG 320) or metalworking applications

Additional Technical Data

Kinematic viscosity (DIN 51562 part 1)		
at 100 °C	42	mm ² /s
Viscosity index (DIN ISO 2909)	176	
Thermogravimetric Analysis (Cognis-Method TA-TGA-SOP 6) (Loss in mass-% when continuously increasing the temperature at a rate of 20 °C/min)		
200°C	0,1	%
250°C	0,5	%
300°C	1,0	%
EP and AW properties Shell "Four-ball-Tester"		
Diameter of scull-caps (DIN 51350 part 3) at 450 N, 1 hour	0,7	mm
Welding load (DIN 51350, part 2)	1400	N

The product can be stored for at least 2 years at ambient storage conditions and temperature without any deterioration.

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COGNIS DEUTSCHLAND GmbH & CO KG

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