

SYNATIVE ES TMP 05/140

Composition

Trimethylolpropane-complex ester

Technical Data

Item	Value	Method / Remarks
Appearance:	Clear, yellowish liquid	
Flash Point:	min. 290 °C	DIN ISO 2592
Cloud Point:	max. -15 °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:	84 - 92	DGF C-V 11 b
Hydroxyl Value:	max. 15	DIN 53240 DGF C-V 17 a (53)
Saponification Value:	178 - 188	DIN 53401 DGF C - V 3 (77)
Viscosity:	40 °C 130 - 145 mm ² /s	DIN 51562
Color:	Lovibond 1" gelbyellow rot/red max. 10 max. 1,5	DGF C-IV 4 b (84)

Quality Control Data

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

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Cloud Point:	max. -15 °C	DGF D-III 3 (74)
Acid Value:	max. 1	DIN 53402 DGF C-V 2 (81)
Iodine Value:	84 - 92	DGF C-V 11 b
Hydroxyl Value:	max. 15	DIN 53240 DGF C-V 17 a (53)
Saponification Value:	178 - 188	DIN 53401 DGF C - V 3 (77)
Viscosity:	40 °C 130 - 145 mm ² /s	DIN 51562
Color:	Lovibond 1" gelbyellow rot/red max. 10 max. 1,5	DGF C-IV 4 b (84)

Additional Specifications

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

Item	Value	Method / Remark
Flash Point:	min. 290 °C	DIN ISO 2592
Pour Point:	max. -20 °C	DIN ISO 3016

Properties & Use

Basestock for lubricant and biodegradable hydraulic fluids, ISO VG 150

Additional Technical Data

Kinematic viscosity (DIN 51562 part 1)		
at -20°C	3800	mm ² /s
at 20°C	375	mm ² /s
at 100 °C	22	mm ² /s
Viscosity index (DIN ISO 2909)	186	
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	%
250°C	0,5	%
300°C	1,5	%
EP and AW properties Shell "Four-ball-Tester"		
Diameter of scull-caps (DIN 51350 part 3) at 450 N, 1 hour	0,9	mm
Welding load (DIN 51350, part 2)	1400	N
ASTM-Colour (ASTM D 1500)	max. 1,5	

Solubility

SYNATIVE ES TMP 05/140 is soluble in paraffinic and aromatic mineral oils.

Revision-No.

1.2-08.2005 Effective August 19, 2005

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

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