SYNATIVE ES GTC

Composition

Glycerine-tricaprylate

Technical Data

Item		Value	Method / Remarks
Appearance:		Colourless, odourless liquid	
Cloud Point:		max. -5 °C	DIN EN 23015
Pour Point:		max. -10 °C	DIN ISO 3016
Acid Value:		max. 0,1	DIN 53402 DGF C-V 2 (81)
Iodine Value:		max. 0,5	DGF C-V 11 d
Hydroxyl Value:		max. 5	DIN 53240 DGF C-V 17 a (53)
Saponification Value:		335 - 350	DIN 53401 DGF C-V 3 (77)
Density:	20 °C	0,945 - 0,949 g/cm³	DGF C-IV 2 b
Viscosity:	40 °C	13,0 - 15,6 mm²/s	DIN 51562, 1
Color:	Lovibond 5,25" gelb Lovibond 5,25" rot	max. 2 max. 0,5	DGF C-IV 4b

Quality Control Data

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

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Acid Value:		max. 0,1	DIN 53402 DGF C-V 2 (81)
Hydroxyl Value:		max. 5	DIN 53240 DGF C-V 17 a (53)
Saponification Value:		335 - 350	DIN 53401 DGF C-V 3 (77)
Density:	20 °C	0,945 - 0,949 g/cm³	DGF C-IV 2 b
Color:	Lovibond 5,25" gelb Lovibond 5,25" rot	max. 2 max. 0,5	DGF C-IV 4b

Additional Specifications

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

Item	Value	Method / Remark
Cloud Point:	max. -5 °C	DIN EN 23015
Pour Point:	max. -10 °C	DIN ISO 3016
Iodine Value:	max. 0,5	DGF C-V 11 d

Properties & Use

Synthetic lubricant basestock, e.g. for greases in the food sector (FDA-listed) and for metalworking fluids

Additional Technical Data

Kinematic viscosity (DIN 51562 part 1)		
at 40°C	13,3	mm²/s
at 100°C	3,5	mm²/s
Viscosity index (DIN ISO 2909)	149	
Flash point (DIN ISO 2592)	min. 230	°C
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	3	%
300°C	26	%
EP and AW properties Shell "Four-ball-Tester"		
Diameter of scull-caps (angelehnt an DIN 51350 part)		
at 450 N, 1 hour	0,60	mm
at 600 N, 1 hour	0,90	mm
Welding load (DIN 51350, part 2)	1400	N
Ageing/Discolouring (Cognis-Method CCE-CF-AWT)		
a.) original colour	1	
b.) Gardner-colour		
at 150°C	1	
at 200°C	1	
at 250°C	5 - 6	

Hydrolytic stability (Cognis-Method CCE-CF-AWT)		
after 0 h	max. 0,1	
after 100 h	ca. 1	
after 500 h	ca. 5	
Smoke point (DGF C-IV 9)	200	°C
Evaporation loss (DIN 51581)	ca. 6	%
Carbon residue (DIN 51551)	0	%

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