

SYNATIVE ES IBTI

Composition

Tallow fatty acid isobutylester

Technical Data

Item	Value	Method / Remarks
Appearance:	Clear, yellowish liquid	
Flash Point:	min. 160 °C	DIN ISO 2592
Cloud Point:	max. 6 °C	DIN EN 23015
Pour Point:	max. 4 °C	DIN ISO 3016
Acid Value:	max. 0,5	DIN EN ISO 3682
Iodine Value:	42 - 48	DIN 53241
Hydroxyl Value:	max. 2	DIN 53240
Saponification Value:	170 - 180	DIN EN ISO 3681
Density: 20 °C	0,858 - 0,862 g/cm ³	DIN 51757 V4
Viscosity: 20°C	8 - 10 mPa.s	DIN 53015
Viscosity:	6,8 mm ² /s	DIN 51562 part 1
Viscosity Index:	255	DIN ISO 2909
Color: Lovibond 5,25" gelb	max. 5,0	DGF C-IV 4 b
Lovibond 5,25" rot	max. 1,0	

Quality Control Data

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

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Lovibond 5,25" rot	max. 1,0	

Additional Specifications

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

Item	Value	Method / Remark
Flash Point:	min. 160 °C	DIN ISO 2592

Cloud Point:
Pour Point:

max. 6 °C
max. 4 °C

DIN EN 23015
DIN ISO 3016

Properties & Use

Synthetic lubricant basestock, e.g. for metalworking fluids

Additional Technical Data

Kinematic viscosity (DIN 51562, 1)		
at 100°C	2,4	mm ² /s
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	5	%
250°C	33	%
300°C	97	%
EP and AW properties Shell "Four-ball-Tester"		
Diameter of scull-caps (DIN 51350 part 3)		
at 450 N, 1 hour	0,60	mm
at 600 N, 1 hour	1,90	mm
Welding load (DIN 51350, part 2)		
	1200	N
Ageing/Discolouring (Cognis-Method CCE-CF-AWT)		
a.) original colour	1	
b.) Gardner Colour		
at 150°C	1	
at 200°C	3	
at 250°C	--	
Hydrolytic stability (Cognis-Method CCE-CF-AWT)		
after 0 h	max. 0,5	
after 100 h	18	
after 500 h	122	

Viscosity (DIN 51562 part 1)		
at 40°C	6,8	mm ² /s
Viscosity Index (DIN ISO 2909)	255	
Smoke point (DGF C-IV 9)	152	°C
Noack volatility (DIN 51581)	64	%
Carbon residue (DIN 51551)	0	%

Revision-No.

1.1-10.2003 Effective October 8, 2003

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

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