

# SYNATIVE ES DEHS

## Composition

Di-2-Ethylhexylsebacate

## Technical Data

Item	Value	Method / Remarks
<b>Appearance:</b>	Clear, colourless liquid	
<b>Flash Point:</b>	min. 200 °C	DIN ISO 2592
<b>Pour Point:</b>	max. -60 °C	DIN ISO 3016
<b>Acid Value:</b>	max. 0,1	DIN EN ISO 3682
<b>Iodine Value:</b>	max. 0,3	DGF C-V 11 d
<b>Hydroxyl Value:</b>	max. 2,0	DIN 53240 DGF C-V 17a (53)
<b>Saponification Value:</b>	255 - 273	DIN EN ISO 3681
<b>Density:</b> 20 °C	0,912 - 0,916 g/cm <sup>3</sup>	DIN 51757 V 4
<b>Viscosity:</b> 40 °C	10,5 - 12,5 mm <sup>2</sup> /s	DIN 51562
<b>Viscosity:</b> 20 °C	19 - 23 mPas	DIN 53015
<b>Color:</b> Lovibond 5,25" gelb Lovibond 5,25" rot	max. 1,5 max 0,3	DGF C-IV 4b
<b>Brechungsindex/ Refractive Index:</b> 20°C	1,449 - 1,452	DIN 51423

## Quality Control Data

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

Item	Value	Method / Remarks
<b>Acid Value:</b>	max. 0,1	DIN EN ISO 3682
<b>Hydroxyl Value:</b>	max. 2,0	DIN 53240 DGF C-V 17a (53)
<b>Saponification Value:</b>	255 - 273	DIN EN ISO 3681
<b>Color:</b> Lovibond 5,25" gelb Lovibond 5,25" rot	max. 1,5 max 0,3	DGF C-IV 4b
<b>Brechungsindex/ Refractive Index:</b> 20°C	1,449 - 1,452	DIN 51423

## **Additional Specifications**

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

<b>Item</b>	<b>Value</b>	<b>Method / Remark</b>
<b>Pour Point:</b>	max. -60 °C	DIN ISO 3016
<b>Iodine Value:</b>	max. 0,3	DGF C-V 11 d
<b>Density:</b> 20 °C	0,912 - 0,916 g/cm <sup>3</sup>	DIN 51757 V 4
<b>Viscosity:</b> 40 °C	10,5 - 12,5 mm <sup>2</sup> /s	DIN 51562
<b>Viscosity:</b> 20 °C	19 - 23 mPas	DIN 53015

## **Properties & Use**

Synthetic lubricant basestock

## **Additional Technical Data**

<b>Cloud point</b> (DIN ISO 3015)	max. -30	°C
<b>Kinematic viscosity</b> (DIN 51562 part 1)		
at 100°C	3,4	mm <sup>2</sup> /s
<b>Viscosity index</b> (DIN ISO 2909)	150	
<b>Flash point</b> (DIN ISO 2592)	min. 200	°C
<b>Thermogravimetric Analysis</b> (Cognis-Method TA-TGA-SOP 6) (Loss in mass-% at a continuous heating rate of 20 °C/min)		
200°C	1	%
250°C	10	%
300°C	70	%
<b>EP and AW properties</b> Shell "Four-ball-Tester"		
<b>Diameter of scull-caps</b> (DIN 51350, part 3)		
at 450 N, 1 hour	0,80	mm
at 600 N, 1 hour	1,20	mm
<b>Welding load</b> (DIN 51350, part 2)	1400	N
<b>Ageing/Discolouring</b> (Cognis-method CCE-CF-AWT)		
a.) original colour	1	
b.) Gardner colour		
at 150°C	1	
at 200°C	1	
at 250°C	3 - 4	

<b>Smoke point</b> (DGF C-IV 9)	190	°C
<b>Evaporation loss</b> (Noack) (DIN 51581)	18	%
<b>Carbon residue</b> according to Conradson (DIN 51551)	0,1	%
<b>Hydrolytical Stability</b> (Cognis-method CCE-CF-AWT)		
after 0 h	0,2	
after 100 h	1	
after 500 h	5	

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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