

SYNATIVE ES 3237

Composition

Polyol-complex-ester

Technical Data

Item	Value	Method / Remarks
Appearance:	Clear, light brown liquid	
Flash Point:	min. 300 °C	DIN ISO 2592
Pour Point:	max. -22 °C	DIN ISO 3016
Acid Value:	max. 0,5	DIN EN ISO 3682
Iodine Value:	max. 13	DIN 53241
Hydroxyl Value:	9 - 17	DIN 53240
Saponification Value:	270 - 305	DIN EN ISO 3681
Density: 20 °C	0,960 - 0,980 g/cm ³	DIN 51757 V4
Viscosity: 40 °C	425 - 465 mm ² /s	DIN 51562, 1
Viscosity: 100 °C	34 - 38 mm ² /s	DIN 51562, 1
Viscosity Index:	min. 110	DIN ISO 2909
Color: Lovibond 5,25" gelb	max 50	DGF C-IV 4 b
Lovibond 5,25" rot	max 10	

Quality Control Data

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

Item	Value	Method / Remarks
Pour Point:	max. -22 °C	DIN ISO 3016
Acid Value:	max. 0,5	DIN EN ISO 3682
Iodine Value:	max. 13	DIN 53241
Hydroxyl Value:	9 - 17	DIN 53240
Saponification Value:	270 - 305	DIN EN ISO 3681
Density: 20 °C	0,960 - 0,980 g/cm ³	DIN 51757 V4
Viscosity: 40 °C	425 - 465 mm ² /s	DIN 51562, 1
Color: Lovibond 5,25" gelb	max 50	DGF C-IV 4 b
Lovibond 5,25" rot	max 10	

Additional Specifications

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

Item	Value	Method / Remark
Flash Point:	min. 300 °C	DIN ISO 2592

Viscosity:	100 °C	34 - 38 mm ² /s	DIN 51562, 1
Viscosity Index:		min. 110	DIN ISO 2909

Properties & Use

High temperature stable ester, e.g. for greases and chlorine-free metal drawing processes

Additional Technical Data

Refractive index (DIN 51423, ASTM D 1218)	1,463	
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	0,50	%
250°C	1,0	%
300°C	2,0	%
EP and AW properties Shell Four-ball-Tester		
Diameter of scull-caps (DIN 51350 part 3) at 450 N, 1 hour	1,30	mm
Welding load (DIN 51350, part 2)	1500	N

Solubility

SYNATIVE ES 3237 is soluble in mineral oils forming clear solutions

Revision-No. 1.1-10.2003 Effective October 10, 2003

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

All products in the text marked with an ® are trademarks of the Cognis group.

The information on product specifications provided herein is only binding to the extent confirmed by Cognis in a written Sales Agreement. COGNIS EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR THE SUITABILITY OF THE PRODUCTS FOR ANY SPECIFIC OR PARTICULAR PURPOSES INTENDED BY THE USER. Suggestions for the use and application of the products and guide formulations are given for information purposes only and without commitment. Such suggestions do not release Cognis' customers from testing the products as to their suitability for the customer's intended processes and purposes. Cognis does not assume any liability or risk involved in the use of its products as the conditions of use are beyond its control. The user of the products is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties.

COGNIS DEUTSCHLAND GmbH & CO KG

F_S

