

Synative® ES DNA

July 2020 | Data Sheet | Replaced Version April 2013

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Chemical composition Aliphatic dicarboxylic acid esters

Properties

Appearance Clear, colourless to yellowish liquid

Technical data

The data listed below are intended as a guide to facilitate handling and cannot be regarded as specified data. Specified product data are issued as a separate product specification.

Characteristic / Method	Unit	Synative® ES DNA
Kinematic viscosity (DIN 51562)	mm ² /s	
at – 40 °C		1500
at 0 °		58.5
at 20 °C		22.5
at 40 °C		11.0
at 100 °C		3.1
Viscosity index (ISO 2909)		151
Density at 20 °C (DIN 51757)	g/cm ³	0.922
Pour point (DIN ISO 3016)	°C	< – 70
Flash point (DIN ISO 2592)	°C	220
Water content (Karl Fischer)	g/100g	0.1 max
Neutralisation number (DIN 51558)	mgKOH/g	0,07 max
Noack volatility (DIN 51581)	%wt loss	16
Emulsifying behaviour (DIN 51554)	Rating	No emulsion 1

Solubility

Synative ES DNA is soluble in all proportions with mineral oils and poly-alpha-olefins.

Applications

Synative ES DNA is an ester with the following properties:

- very good flow properties over a wide temperature range
- low pour point
- low volatility
- high flash point
- good stability in mineral oil and poly-alpha-olefin
- very good compatibility with additives.

Elastomers in contact with lubricating oils containing Synative ES DNA swell only slightly and usually within the permitted range.

Synative ES DNA is compatible with synthetic hydrocarbons (poly-alpha-olefins) and hydrocracked basestocks and can be readily combined with various additives types such as viscosity index improvers (OCP, PIB), anti-wear and high pressure additives.

By virtue of its outstanding properties at very low temperatures, and its low degree of volatility, Synative ES DNA is eminently suitable for multigrade engine oils of the type SAE 5W/x and 10W/x.

Combinations of Synative ES DNA and appropriate thickeners (e.g. lithium soaps) are suitable for manufacturing greases for applications in the sub-zero temperature range.

Synative ES DNA can also be used for bio-hydraulic applications.

Storage**Storage stability**

Provided it is stored at ambient storage conditions and the drums are kept tightly sealed, Synative ES DNA has a shelf life of at least two years in its original packaging.

Safety

When using this product, the information and advice given in our **Safety Data Sheet** should be observed. Due attention should also be given to the **precautions** necessary for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

July 2020

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