

Product Data Sheet**Product:** Fatty acid methyl ester (FAME)**1. General requirements**

Property	Limits	Test-Method
Ester content	min. 96,5 % (m/m)	ČSN EN 14103
Density at 15°C	860 – 900 kg/m ³	ČSN EN ISO 12185
Viscosity at 40°C	3,50 – 5,00 mm ² /s	ČSN EN ISO 3104
Flash point ^{*1}	min. 101°C	EN ISO 2719
Cetane number ^{*1}	min. 51,0	EN ISO 5165
Copper strip corrosion (3 hours at 50°C) ^{*1}	1 Class	EN ISO 2160
Oxidation stability, 110°C	min. 10,0 h	ČSN EN 15751
Acid value	max. 0,50 mg KOH/g	ČSN EN 14104
Iodine value ^{*1}	max. 120 g I ₂ /100 g	EN 16300
Linolenic acid methyl ester	max. 12,0 % (m/m)	ČSN EN 14103
Polyunsaturated Methyl ester (≥4 Double bonds) ^{*1}	max. 1,00 % (m/m)	EN 15779
Methanol content	max. 0,20 % (m/m)	ČSN EN 14110
Monoglyceride content	max. 0,70 % (m/m)	ČSN EN 14105
Diglyceride content	max. 0,20 % (m/m)	ČSN EN 14105
Triglyceride content	max. 0,20 % (m/m)	ČSN EN 14105
Free Glycerol	max. 0,02 % (m/m)	ČSN EN 14105
Total Glycerol	max. 0,25 % (m/m)	ČSN EN 14105
Water content	max. 300 mg/kg	ČSN EN ISO 12937
Total contamination	max. 24 mg/kg	ČSN EN 12662
Sulphated ash content ^{*1}	max. 0,02 % (m/m)	ISO 3987
Sulphur content ^{*1}	max. 10,0 mg/kg	EN ISO 20884
Group I. metals (Na + K) ^{*1}	max. 5,0 mg/kg	EN 14538
Group II. metals (Ca + Mg) ^{*1}	max. 5,0 mg/kg	EN 14538
Phosphorus content ^{*1}	max. 4,0 mg/kg	EN 14107

^{*1} marked parameters are defined in an external accredited laboratory at a frequency according to internal documents PREOL

2. Requirements depending on climatic conditions

The use of RME as fuel in a 100% concentration:

Property	Limits			Test-Method
CFPP	15.04. – 30.09.	max. 0°C	Class B	ČSN EN 116
	01.10. – 15.11.	max. -10°C	Class D	
	16.11. – 28.02.	max. -20°C	Class F	
	01.03. – 14.04	max. -10°C	Class D	

The use of RME as blending component for diesel:

Property	Limits			Test-Method
CFPP without using depressant	01.04. – 30.09.	max. 0°C	Class d	ČSN EN 116
	01.10. – 31.03.	max. -10°C	Class f	
Cloud Point without using depressant ^{*)}	01.04. – 30.09.	max. 5°C	Class d	EN 23015
	01.10. – 31.03.	max. -3°C	Class f	

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3. Other requirements

3.1 Sampling

Sampling is carried out in accordance with ČSN EN ISO 3170.

3.2 Expiry date and warranty period

During the time period ending with the expiry date, the product characteristics are kept constant and the product meets the quality requirements, assuming the recommended storage conditions achieved. The length of the warranty period is determined by the expiry date. The defined warranty period is 6 months after the expedition date for tank and tank truck filling.

3.3 Transport

The product is transported using either rail or truck tanks. Neither transport nor storage packaging may be damaged. All the packaging has to be closed properly and constant quality and amount of the transported material has to be secured during the transport.

The transported goods have to be protected against undesirable weather conditions and direct sunlight (or potentially different sources of heat, flame or sparks) during the transport.

3.4 Storage

The product has to be protected against undesirable weather conditions and direct sunlight during the storage. The environment temperature should not exceed 50 °C.

It is allowed to pump the product from the transport packaging only to the storage tanks exclusively designated for such products.

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