## **Product Information**

## **AVENO Heavy Duty FS 5W-40**

0002-000113



## Description

AVENO Heavy Duty FS 5W-40 is a high-alloyed smooth-running engine oil with synthetic base oils and selected additives. It is ideal for commercial vehicles. AVENO Heavy Duty FS 5W-40 guarantees a reliable cold start at extremely low temperatures, primarily in terms of the cold viscosity. Anti-wear properties as well as a reduction of friction losses. Extended oil change intervals as per manufacturer's instructions.

## Instructions for use

AVENO Heavy Duty FS 5W-40 is used in diesel lorry engines with and without turbo charging. The operating instructions of the automobile and engine manufacturer must be observed.

Quality classification				
Specification				
• API CJ-4		• ACEA E7/E9	• ACEA E7/E9	
• API SM		- , -		
Barris and the				
Recommendation				
Caterpillar ECF-2/ECF-3		• DTFR 15C100 (228.31)	• DTFR 15C100 (228.31)	
Chrysler MS-10902		<ul> <li>Ford WSS-M2C171-F1</li> </ul>	• Ford WSS-M2C171-F1	
Cummins CES 20081		• MAN M 3575, MAN M 32	• MAN M 3575, MAN M 3275	
<ul> <li>DDC 93K218, DDC 93K215, DDC 93K214</li> </ul>		• MTU Typ 1/Typ 2	• MTU Typ 1/Typ 2	
• Deutz DQC II-10 LA		<ul> <li>Renault VI RLD-3</li> </ul>	• Renault VI RLD-3	
Mack EO-O Premium Plus		<ul> <li>Volvo VDS-4</li> </ul>	Volvo VDS-4	
Properties				
An excellent temperature and viscosity behavior		<ul> <li>Ideal for difficult operation</li> </ul>	Ideal for difficult operating conditions	
• Very good wear protection		<ul> <li>Reduced evaporation</li> </ul>	Reduced evaporation	
<ul> <li>Compelling detergent/dispersant properties</li> </ul>		<ul> <li>Good cold starting prope</li> </ul>	<ul> <li>Good cold starting properties</li> </ul>	
High oxidation stability		<ul> <li>Reduced fuel consumption</li> </ul>	Reduced fuel consumption	
Technical specifications				
Properties	Data	Unit	Testing under	
Kinematic Viscosity at 40°C	90.3	mm²/s	DIN 51659-2:2017-02	
Kinematic Viscosity at 100°C	14.5	mm²/s	DIN 51659-2:2017-02	
Viscosity Index	166		DIN ISO 2909:2004-08	
Appearance	YELLOWBROWN		VISUELL	
Viscosity CCS at -30°C	5900	mPa*s	ASTM D 5293:2020	
Density at 15°C	852	kg/m³	DIN EN ISO 12185:1997-11	
Pour Point	-45	°C	ASTM D 7346:2015	
Total Base Number (TBN)	10.0	mgKOH/g	ASTM D 2896:2015	

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