



# WHEELERS MOTOR OIL - MSAP

## SAE 10W-40

High Performance Low Friction Oil of the latest generation

### Description and Properties

**Wheelers MSAP SAE 10W-40** is a high-performance engine oil based on the newest additive technology, matched with special base oils. It was developed for the latest generation of low-emission engines and provides excellent fuel economy.

Due to the low sulfur, phosphate and ash content as well as the outstanding oxidation and shear stability, it is used in modern truck engines.

**Wheelers MSAP SAE 10W-40** is used as SHPD oil in engines with and without particulate filter and catalytic converter. It meets the special requirements of Low SAPS technology and is reliable in terms of cold start behavior and lubricity at high temperatures

**Wheelers MSAP SAE 10W-40** complies with the current API CK-4 and is excellently suited for use in EURO 2, EURO 3, EURO 4, EURO 5 und EURO 6 engines in combination with diesel fuel up to 500ppm sulfur content.

### Specification / Recommendation

ACEA E9-16	Detroit Diesel DDC93K222	Renault VI RLD-3
API CK-4	Deutz DQC-III-10LA	Volvo VDS-4.5
CAT ECF-3	MAN 3575 und 3275	Ford WSS-M2C171-F1
Cummins CES 20086	MB 228.31	Mack EOS-4.5

### Typical Properties

Wheelers MSAP SAE 10W-40	Unit	Value	Method
Density at 15°C	kg/m <sup>3</sup>	863	DIN 51 757
Viscosity at 40°C	mm <sup>2</sup> /s	99	DIN 51 562
Viscosity at 100°C	mm <sup>2</sup> /s	14,30	DIN 51 562
Viscosity Index		148	DIN ISO 2909
CCS at -25°C	mPa.s	6320	DIN 51 377
Pourpoint	°C	-36	DIN ISO 3016
Flashpoint	°C	236	DIN ISO 2592
TBN	mg KOH/g	10,2	DIN ISO 3771
Sulphated ash	mass. %	0,95	DIN 51 575
Sulphur	mass. %	0,36	
Phosphorus	mass. %	0,11	

Specification variations in these characteristics may occur the instructions of manufacturer must be regarded. Further informations to be available by MSDS.

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