



# WHEELERS MOTOR OIL - MSAP

## SAE 10W-40

Ultra High Performance Low Friction Low Emissions Heavy-Duty Engine Oil

### Description and Properties

Wheeler's motor oil MSAP SAE 10W-40 is an ultra-high performance heavy duty engine oil with excellent low friction properties. It is made from semi synthetic base oils with high VI and advanced additive packages, which care for excellent dispersant and detergent properties and oxidation protection of the oil and secure the engine from wear and corrosion

### Benefits

Wheeler's motor oil MSAP SAE 10W-40 is :

- recommended for four-stroke naturally aspirated, turbocharged, and supercharged diesel engines and may also be used in four-stroke gasoline engines.
- ideal for mixed commercial fleets, farm machinery, construction equipment, marine, and other off-highway applications.
- foreseen for diesel engines meeting Euro IV and Euro V emission requirements and running under severe conditions, such as extended oil drain intervals.
- recommended for engines with particulate filters, and suitable for such without DPF, and for most EGR engines, as well as most engines fitted with SCR NOx reduction systems
- recommended for farm- and construction machinery (American manufactures) they need engine oils for API CJ-4 with after treatment systems (TIER 4)

### Specification / Recommendation

ACEA E9-08 / E7-04	Cat ECF-3 / ECF-2 / ECF-1-a	Volvo VDS-4
API CJ-4 / SM	Cummins CES 20081	Mack EO-O Premium Plus
MB 228.31	JDQ-78X	
MAN 3275 / 3575		
MTU Type 2.1		
DDC 93K218		

### Typical Properties

Wheeler's MSAP SAE 10W-40	Unit	Value	Method
Density at 15°C	kg/m <sup>3</sup>	864	DIN 51 757
Viscosity at 40°C	mm <sup>2</sup> /s	88	DIN 51 562
Viscosity at 100°C	mm <sup>2</sup> /s	13,50	DIN 51 562
Viscosity Index		156	DIN ISO 2909
CCS at -25°C	mPa.s	6400	DIN 51 377
Pourpoint	°C	-36	DIN ISO 3016
Flashpoint	°C	232	DIN ISO 2592
TBN	mg KOH/g	8,8	DIN ISO 3771

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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