

# WHEELERS MOTOR OIL -LSAP

## SAE 10W-40

### HIGH PERFORMANCE MOTOR OIL FOR EURO 4- and EURO 5- COMMERCIAL CAR ENGINES

#### Description & Application

**WHEELERS LSAP 10W-40** is a semi-synthetic high performance motor oil, which meets par excellence the highly exalted tribological requirements of the *EURO 4- and EURO 5* - commercial car engine generation.

**WHEELERS LSAP 10W-40** falls below the limits for sulphated ash, sulphur- and phosphorus content (Low SAP's), regulated by law as from 2008 and thus provides one of the basis for the trouble-free operating of downstream exhaust gas treating devices (particle filter), which makes it possible to meet the EURO 5 -standard for diesel engines.

**WHEELERS LSAP 10W-40** assures top performance at the quality criterions wear protection and friction reduction, detergency & dispersancy, corrosion prevention, viscosity temperature dependency, thermal oxidative stability, low evaporation tendency, good elastomer compatibility and few environmental impact.

**WHEELERS LSAP 10W-40** ensures the EURO 4- and -5 - turbo charged diesel engines extremely extended drain intervals, excellent motor cleanliness, very good cold starting and warm-up performance even at lowest temperatures, outstanding aging resistance, reliable lubrication under all operation conditions and reduced pollution of noxious matter caused by the lubricant.

#### Specification / Recommendation

ACEA E6- / E7- / E9-08  
API CI-4  
MTU Type 3.1  
Renault Truck RXD ; RGD  
Mack EO-M Plus  
CAT ECF-1-a  
Deutz DQC IV-10 LA  
Cummins CES 20076, 20077

Volvo CNG  
Scania LA

MB 228.51 (\*)  
MAN 3477, 3271-1  
Volvo VDS-3  
Mack EO-N  
Renault VI RLD-2

(\*) MB 228.51 covers 226.9

#### Nominal Values

WHEELERS LSAP SAE 10W-40	Unit	Value	Method
Density at 15	kg/m <sup>3</sup>	860	DIN 51 757
Viscosity at 40°C	mm <sup>2</sup> /s	92,8	DIN 51 562
Viscosity at 100°C	mm <sup>2</sup> /s	14,8	DIN 51 562
Viscosity Index		167	DIN ISO 2909
CCS at -25°C	mPa.s	6600	DIN 51 377
Pourpoint	°C	-33	DIN ISO 3016
Flashpoint	°C	228	DIN ISO 2592
TBN	mg KOH/g	9,9	DIN ISO 3771
Sulphated ash	mass. %	0,95	DIN 51 575
Sulphur	mass. %	0,21	
Phosphorus	mass. %	0,07	

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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