

# KAPPA OPTIMA 15W-40



*Multigrade oil for diesel engines.*

## APPLICATIONS

- Developed to answer to the very severe technical constraints of the new low-emission Diesel engines (Euro3). Suitable for all other Diesel engines, turbocharged or normally aspirated.
- Adapted to the most severe servicing conditions: transports, public works...
- Contribute to respect the new anti-pollution norms for EURO 2 and EURO 3 engines.

## PERFORMANCES

### Specifications

ACEA E5 / E7  
API CI-4/SL  
GLOBAL DHD-1

### OEMs' approvals

MERCEDES-BENZ MB-Approval 228.3  
MAN M 3275  
CUMMINS 20071/20072/20076/20077/20078  
VOLVO VDS-3  
MTU OIL TYPE 2  
MACK EO-M+  
RENAULT TRUCKS RLD/RLD-2  
CATERPILLAR CAT ECF-1  
ZF TE-ML 04C

## CUSTOMER BENEFITS

### Increased drain intervals

- Its very high performance level insures longer drain intervals.

### Very high technical performances

- Exceptional antiwear and anticorrosion properties.
- Good efficiency against bore polishing.
- Excellent viscosity stability in operation.
- Very high detergency and dispersancy levels (limits oil thickening due to soots).

## CHARACTERISTICS

KAPPA OPTIMA 15W-40	Units	SAE Grade 15W-40
Volumetric mass at 15°C	kg/m <sup>3</sup>	883
Viscosity at 100°C	mm <sup>2</sup> /s	14.2
Viscosity at 40°C	mm <sup>2</sup> /s	105
Viscosity index	-	142
Flash point	°C	>200
Pour Point	°C	-30
T.B.N	mgKOH/g	10.3

TOTAL LUBRIFIANTS  
16, rue de la République  
F- 92800 PUTEAUX  
1/2

KAPPA EXTRA PLUS 15W-40  
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N° MPR/10/05



This lubricant used in accordance with our recommendations and for the application for which it is intended does not represent a special hazard. A safety data file conforming to the requirements of current E.U. legislation is available from your local trade consultant.

