# MULTIGRADE CK-4 SAE 10W40

This semi-synthetic lubricant extends the lifespan of the equipment by offering excellent wear resistance and engine cleanliness. The high level of wear resistance is obtained through the additive package's outstanding oxidation resistance, shear resistance and aeration control. The formulation is altered to extend the lifespan of the application compared to previous comparable engine oil formulations.

### **APPLICATIONS**

A wide range of different original equipment manufacturer specifications are met by this excellent heavy-duty engine oil. This engine oil's full backward compatibility with the CJ-4 specification turns it into a versatile solution for both on- and off-road applications. It is compatible with emission control technology EURO IV, V and VI for trucks; as well as stage IIIB, IV and Tier 4i, 4f for heavy-duty off-road.

#### **FEATURES**

Extended wear protection: extended lifespan of the equipment. Improved shear stability: extended optimal oil performance. Improved engine cleanliness: increased vehicle uptime.

#### **PERFORMANCE**

ACEA	E11	DEUTZ	DQC-III-10 LA
ACEA	E9-16	DEUTZ	DQC-III-18 LA
API	CI-4	FORD	WSS-M2C171-F1
API	CJ-4	JD	JDQ-78X
API	CK-4	MACK	EO-M PLUS
API	SN	MACK	EO-N
JASO	DH-1	MACK	EO-N Premium Plus
JASO	DH-2	MACK	EO-O Premium Plus
ALLISON	C4	MACK	EO-S 4.5
API	CI-4 Plus	MAN	M3575
CATERPILLAR	ECF-1a	MAN	M3775
CATERPILLAR	ECF-2	MB	228.31
CATERPILLAR	ECF-3	MTU	Oil Category 2.1
CATERPILLAR	TO-2	RENAULT	RGD
CUMMINS	CES 20076	RENAULT	RLD
CUMMINS	CES 20077	RENAULT	RLD-2
CUMMINS	CES 20078	RENAULT	RLD-3
CUMMINS	CES 20081	RENAULT	RLD-4
CUMMINS	CES 20086	RENAULT	RXD
DAIMLER TRUCK	DTFR 15C100	VOLVO	VDS-3
DETROIT DIESEL	DFS 93K215	VOLVO	VDS-4
DETROIT DIESEL	DFS 93K218	VOLVO	VDS-4.5
DETROIT DIESEL	DFS 93K222		



## TYPICAL CHARACTERISTICS

Test	Method	Unit	Average results
Density at 15°C	ASTM D4052	g/ml	0.859
Kinematic viscosity at 40°C	ASTM D445	mm²/s	87.5
Kinematic viscosity at 100°C	ASTM D445	mm²/s	13.8
Viscosity index	ASTM D2270		162
B.N. (HCLO4 method)	ASTM D2896	mg KOH/g	8.2
Pour point	ASTM D6892	°C	-39
Sulfated Ash	ASTM D874	Mass %	1.0
Flash Point COC	ASTM D92	°C	224

We reserve the right to alter the general characteristics of our products in order to let our customers benefit of the latest technical evolutions.

