

# CHAMPION OEM SPECIFIC 10W-40 MS EXTRA

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.

## SPECIFICATIONS

ACEA	E11	DEUTZ	approval DQC-III-18 LA
ACEA	E7	DEUTZ	DQC-III-10 LA
ACEA	E9-16	DTFR	approval 15C100
API	CI-4	FORD	WSS-M2C171-F1
API	CI-4 Plus	JD	JDQ-78X
API	CJ-4	MACK	approval EO-S 4.5
API	CK-4	MACK	EO-M PLUS
API	SN	MACK	EO-N
API	SP	MACK	EO-N Premium Plus
CHINESE STANDARD	D1	MACK	EO-O Premium Plus
JASO	DH-1	MAN	approval M3775
JASO	DH-2	MAN	M3575
ALLISON	C4	MTU	approval Oil Category 2.1
ALLISON	TES 439	RENAULT	approval RLD-3
CATERPILLAR	ECF-1a	RENAULT	RGD
CATERPILLAR	ECF-2	RENAULT	RLD
CATERPILLAR	ECF-3	RENAULT	RLD-2
CATERPILLAR	TO-2	RENAULT	RLD-4
CUMMINS	CES 20076	RENAULT	RXD
CUMMINS	CES 20077	VOITH	Retarder Oil Class B
CUMMINS	CES 20078	VOLVO	approval VDS-4.5
CUMMINS	CES 20081	VOLVO	VDS-3
CUMMINS	CES 20086	VOLVO	VDS-4
CUMMINS	CES 20100		
DETROIT DIESEL	DFS 93K215		
DETROIT DIESEL	DFS 93K218		
DETROIT DIESEL	DFS 93K222		

### CHAMPION CHEMICALS NV

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**CHAMPION**  
LUBRICANTS



## TYPICAL CHARACTERISTICS

Test	Method	Unit	Average results
Density at 15°C	ASTM D4052	g/ml	0.859
Kinematic viscosity at 40°C	ASTM D445	mm <sup>2</sup> /s	87.5
Kinematic viscosity at 100°C	ASTM D445	mm <sup>2</sup> /s	13.8
Viscosity index	ASTM D2270		162
B.N. (HClO <sub>4</sub> 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.

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