This heavy-duty diesel engine oil is a semi-synthetic lubricant offering exceptional wear resistance. It is capable of maintaining its original composition thanks to its outstanding oxidation resistance, shear resistance and aeration control, giving it an increased drain interval compared to previous formulations.

# **APPLICATIONS**

Both modern and older engines benefit from the backward compatible heavy-duty diesel engine oil for most OEMs, making it a perfect match for a wide range of engine types. It is capable of offering optimal protection to a range of Caterpillar, Mack, Renault, Volvo and other market-leading engines with or without after-treatment system, turbocharger or supercharger. 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**

Improved engine cleanliness: Improved engine cleanliness

High wear protection: High wear protection

Increased oxidative stability: extended optimal oil performance.

## **SPECIFICATIONS**

E11
E7
E9-16
CI-4
CI-4 Plus
CJ-4
CK-4
SN
D1
DH-1
DH-2
C4
ECF-1a
ECF-2
ECF-3
T0-2
CES 20076
CES 20077
CES 20078
CES 20081
CES 20086
CES 20100
PSQL 2.1 E
DFS 93K215
DFS 93K218
DFS 93K222
DQC-III-10 LA

DEUTZ DTFR FORD JD MACK MACK MACK MACK	DQC-III-18 LA 15C100 WSS-M2C171-F1 JDQ-78X EO-M PLUS EO-N EO-N Premium Plus EO-0 Premium Plus	
MACK MAN	EO-S 4.5 M3575	
MAN	M3775	
MTU	Oil Category 2.1	
RENAULT	RGD	
RENAULT	RLD	
RENAULT	RLD-2	
RENAULT	RLD-3	
RENAULT	RLD-4	
RENAULT	RXD	
VOLVO	VDS-3	
VOLVO	VDS-4	
VOLVO	VDS-4.5	

### CHAMPION CHEMICALS NV

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# **TYPICAL CHARACTERISTICS**

Test	Method	Unit	Average results
Density at 15°C	ASTM D4052	g/ml	0.8582
Kinematic viscosity at 40°C	ASTM D445	mm²/s	70.46
Kinematic viscosity at 100°C	ASTM D445	mm²/s	11.39
Viscosity index	ASTM D2270		155
B.N. (HCLO4 method)	ASTM D2896	mg KOH/g	9.7
Pour point	ASTM D6892	°C	-3
Sulfated Ash	ASTM D874	Mass %	1.0
Flash Point COC	ASTM D92	°C	232

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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