This is a semi synthetic lubricant based on carefully selected very high quality base oils, which satisfies the highest performance standards for large trucks. It can be used for engines equipped with after treatment systems.

## **APPLICATIONS**

Due to its versatile specification levels it is suitable for a wide range of commercial vehicles. Specifically recommended for large truck engines to satisfy the EURO VI standard, TIER IV interim, TIER IV final, TIER V, stage IIIB, stage IV, stage V.

## **FEATURES**

Aftertreatment protection: full after treatment system protection Total engine protection: outstanding engine cleanliness and durability

#### **SPECIFICATIONS**

| ACEA           | E6                    | VOLVO |
|----------------|-----------------------|-------|
| ACEA           | E7                    |       |
| ACEA           | E9                    |       |
| API            | CJ-4                  |       |
| API            | CK-4                  |       |
| JAS0           | DH-2                  |       |
| CATERPILLAR    | ECF-2                 |       |
| CATERPILLAR    | ECF-3                 |       |
| CUMMINS        | CES 20081             |       |
| CUMMINS        | CES 20086             |       |
| DETROIT DIESEL | DFS 93K222            |       |
| DEUTZ          | DQC IV-10 LA          |       |
| DEUTZ          | DQC-IV-18 LA          |       |
| IVECO          | 18-1804 Classe TLS E9 |       |
| JD             | JDQ-78X               |       |
|                |                       |       |

**LIEBHERR** LH-00-ENG5C LA MACK EO-O Premium Plus MACK EO-S 4.5 M3271-1 MAN M3477 MAN M3775 MAN 228.31 MB 228.51 MB 228.52 MB

MTU approval Oil Category 3.1

MTU Oil Category 2.1
RENAULT approval RLD-4

RENAULT RLD-3 SCANIA LA VOLVO VDS-4

# CHAMPION CHEMICALS NV

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VDS-4.5

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# **TYPICAL CHARACTERISTICS**

| Method     | Unit   | Average results   |
|------------|--|---|
| ASTM D4052 | g/ml   | 0.858   |
| ASTM D445  | mm²/s  | 89.9  |
| ASTM D445  | mm²/s  | 13.9  |
| ASTM D2270 |  | 158   |
| ASTM D2896 | mg KOH/g   | 10.2  |
| ASTM D6892 | °C   | -33   |
| ASTM D5293 | mPa.s  | 6600  |
| ASTM D92   | °C   | 216   |
| _          | ASTM D4052 ASTM D445 ASTM D445 ASTM D2270 ASTM D2896 ASTM D6892 ASTM D5293 | ASTM D4052 g/ml  ASTM D445 mm²/s  ASTM D445 mm²/s  ASTM D2270  ASTM D2896 mg KOH/g  ASTM D6892 °C  ASTM D5293 mPa.s |

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

