

## SPECIAL SYNTHETIC BLEND HD 15W-40 MULTIGRADE HEAVY-DUTY MOTOR OIL

**Meeting API Service Levels CH-4, CI-4, CI-4 PLUS, CJ-4, CK-4**

|                                  | <u>Typical Properties</u> |
|----------------------------------|---------------------------|
| SAE Grade, Automotive            | 15W-40                    |
| Viscosity, cSt                   |                           |
| At 40° C                         | 115                       |
| At 100° C                        | 15.4                      |
| Viscosity Index                  | 140                       |
| Viscosity, CCS, D-5293, -20°C/cP | 6000                      |
| Flash Point, (COC), °C/°F        | 238/460                   |
| Pour Point, °C/°F                | -34/-30                   |
| Sulfated Ash, %wt                | 1.0                       |
| Neutralization No., TBN-E        | 9.9                       |
| HTHS, Vis/cP, D-4683             | 4.4                       |
| Gravity, API @ 60° F             | 30.5                      |

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

Special Synthetic Blend HD 15W-40 Multigrade Heavy Duty Motor Oil API CK-4 is the most current formulated heavy duty motor oil for all-season use in highway commercial diesel engines, including EGR equipped engine emission controlled systems. The product is manufactured from selected premium quality base stocks with additive technology to provide engine protection for current EPA exhaust particulate emissions standards using Ultra-Low Sulfur Diesel (ULSD). It meets performance requirements for all naturally aspirated, turbocharged and supercharged, diesel engines as well as all four-cycle gasoline engines. The product reflects test improvements in reducing aeration, better oxidation stability, enhanced soot control, and advanced wear protection.

Special HD Synthetic Blend 15W-40 meets API current service classifications CH-4, CI-4, CI-4 Plus, and CJ-4, and CK-4 and and ACEA European Oil Sequences Section E-7-12 & E-9-12. The product satisfies the following engine manufacturer requirements: Mack EO-0 Premium Plus, Mack EOS-4.5, Renault VI RLD-3, Renault VI RLD-4, Caterpillar ECF-3, Cummins CES 20081, Cummins CES 20086, Detroit Diesel DDC93K218, Detroit Diesel DDC93K222, JASO DH-2, MB-228.31, MAN M3575, MTU 2.1, Deutz DQC III-10 LA, Ford WSS-M2C171-E, Ford WSS-M2C171-F1 Volvo VDS-4, and Volvo VDS-4.5.

### APPLICATIONS

Recommended for all major diesel and mixed fleet (diesel/four-cycle gasoline) engine operations in all service and under all operating conditions where the equipment owner specifies the additional performance benefits of multigrade oils. This product is preferable for newer diesel engines with EGR systems and those equipped with Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC) technologies.