

HPURE OPTIMA D6S (SHPD)

Product Description

Semi-Synthetic Diesel Engine Oil utilizing a Super High Performance Diesel (SHPD) technology delivering outstanding performance and durability. Developed to provide the ultimate protection for low-emission heavy duty engines fitted with diesel particulate filters and other exhaust after-treatment devices, as well as providing the ultimate performance and protection for older engines from Europe, USA and Japan.

Applications / Benefits

- Υ Minimizes oil consumption, long drain interval
- Υ Superior protection against valve train wear
- Υ Neutralizes acids from high sulfur fuel
- Υ Particularly suitable for diesel engines equipped with EGR

Typical Characteristics

| Test Description | Method | Unit | 10W30 | 10W40 | 15W40 |
|-----------------------------|-------------|---------|--------------|--------------|--------------|
| SAE Viscosity Grade | SAE J 300 | - | 10W30 | 10W40 | 15W40 |
| Density @ 15 °C | ASTM D 4052 | kg/L | 0.862 | 0.863 | 0.866 |
| Flash Point | ASTM D 92 | °C | 218 | 218 | 220 |
| Pour Point | ASTM D 97 | °C | -33 | -33 | -27 |
| Kinematic Viscosity @ 40°C | ASTM D 445 | cSt | 72.03 | 101.3 | 104.1 |
| Kinematic Viscosity @ 100°C | ASTM D 445 | cSt | 11.23 | 15.07 | 14.62 |
| Viscosity Index | ASTM D 2270 | - | 148 | 156 | 145 |
| TBN | ASTM D 2896 | mgKOH/g | 11.1 | 11.1 | 11.1 |
| CCS | ASTM D 5293 | cP | ≤7000 | ≤7000 | ≤7000 |

Specifications, Approvals & Recommendations

| | 10W30 | 15W40 |
|------------------|--------------|--------------|
| Y API | CI-4/SL | CI-4/SL |
| Y ACEA | - | E7 |
| Y CATERPILLAR | ECF-1A | ECF-1A |
| Y CATERPILLAR | ECF-2 | ECF-2 |
| Y CUMMINS | CES 20078 | CES 20078 |
| Y CUMMINS | CES 20076 | CES 20077 |
| Y CUMMINS | - | CES 20076 |
| Y DETROIT DIESEL | - | DFS 93K215 |
| Y DEUTZ | - | DQC III |
| Y JASO | DH-1 | DH-1 |
| Y MACK | EO-N | EO-N |
| Y MAN | - | M3275 |
| Y MERCEDES BENZ | - | 228.3 |
| Y MTU | - | CATEGORY 2 |
| Y RENAULT | - | RLD-2 |
| Y VOLVO | - | VDS-3 |

Suitable for the following Uses

| | 10W40 |
|------------------|--------------|
| Y API | CI-4/SL |
| Y ACEA | E7 |
| Y CATERPILLAR | ECF-1A |
| Y CATERPILLAR | ECF-2 |
| Y CUMMINS | CES 20078 |
| Y CUMMINS | CES 20077 |
| Y DETROIT DIESEL | DFS 93K215 |
| Y DEUTZ | DQC III |
| Y DEUTZ | DQC II |
| Y JASO | DH-1 |
| Y MACK | EO-M PLUS |
| Y MACK | EO-N |
| Y MAN | M3275 |
| Y MERCEDES BENZ | 228.3 |
| Y MTU | CATEGORY 2 |
| Y RENAULT | RLD-2 |
| Y VOLVO | VDS-3 |