

Challenger 10W-40

Challenger 10W-40 provides an excellent blend of modern technology base oils and advanced additives, which results in a heavy-duty synthetic engine oil for extending engine life and cleanliness in modern as well as older model diesel and gasoline engines. This product is specialized for higher resistance to oxidation, less wear and tear, reduced sludge build-up and excellent cold start properties at low temperatures.



Properties

- + Very good low temperature properties
- + Protection to wear & tear
- + Very high thermal - & oxidation stability
- + Sludge- & deposit build up prevention
- + Cost effective
- + Enhanced fuel economy
- + Improved viscosity control and used oil pumpability
- + Advanced detergency/dispersancy

Specifications

API CI-4 Plus
 Volvo VDS-3
 ACEA E7/E9
 Caterpillar ECF-3/ECF-2/S-3/TO-2
 Allison C3/C4/TO-2
 MAN 271/M 3275
 MTU Category Type II
 MB 228.3/228.5
 Cummins CES 20071, 20076, 20077, 20078
 JASO DH-1

Table of properties

| Property | Test Method | Unit | Value |
|-----------------------------|-------------|----------|--------|
| Density 15°C | ASTM D 4052 | g/ml | 0.870 |
| Kinematic Viscosity @ 40°C | ASTM D 445 | cSt | 109.04 |
| Kinematic Viscosity @ 100°C | ASTM D 445 | cSt | 15.62 |
| Viscosity Index | ASTM 2270 | None | 151.87 |
| Viscosity at -20°C (CCS) | ASTM D 5293 | mPas | ≤ 7000 |
| Total Acid Number TBN | ASTM 2896 | mg KOH/g | 13 |
| Pour Point °C | ASTM D 97 | °C | -28 |
| Flash Point °C | ASTM D 92 | °C | 228 |

* Characteristic values can fluctuate within the normal range. The information in this publication is based on our current knowledge and experience. They do not release the user from their own tests and trials due to possible influences during the processing and application of our products. A legally binding assurance of certain properties or the suitability for a specific application cannot be derived from our information. It is the responsibility of the recipient of our products to observe any property rights as well as existing laws and regulations.

