



LUBRICANTS

Power-D® Engine Oil

Phillips 66® Power-D Engine Oil is a premium quality universal fleet engine oil designed for use in on-highway diesel trucks and off-highway diesel equipment, as well as in passenger cars and light trucks with either diesel or gasoline engines. It is recommended for use both in EGR-equipped diesel engines and in older, non-EGR diesel engines. It also will provide excellent protection for gasoline engines for use in mixed commercial fleets.

Power-D Engine Oil is formulated with advanced additive technology to provide outstanding wear protection, soot control and bearing corrosion protection. Outstanding soot dispersancy protects against abrasive wear and soot-induced oil thickening, and ensures good low-temperature pumpability even with soot-laden oil. High dispersancy-detergency and a high alkaline reserve (TBN) provide extra protection in extended drain or severe service intervals, and in EGR-equipped engines.

Power-D Engine Oil meets or exceeds the performance requirements of API Service Categories CI-4 and SL, API CI-4 PLUS, and leading OEM specifications and worldwide standards for diesel engine oils. It is backward serviceable for use where API CH-4 or earlier "C" category engine oils, or the concurrent earlier OEM specifications, are specified.

Applications

- On-highway diesel trucks equipped with cooled-EGR, ACERT or other technologies to meet 2004 and earlier exhaust emission standards
- Older diesel equipment with conventional, non-EGR engines
- Mixed fleets with both diesel and gasoline-fueled vehicles
- Off-highway construction, earth moving and mining equipment
- Farm equipment with diesel or gasoline engines

Power-D Engine Oil is licensed or OEM-certified for:

- API Service CI-4 with CI-4 PLUS, CI-4, CH-4, SL
- Cummins CES 20078
- Detroit Diesel DFS 93K214
- Mack EO-N Premium Plus 03
- Mercedes-Benz Sheet 228.3
- Renault VI RLD-2
- Volvo VDS-3

Premium Universal Fleet Engine Oil

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



Power-D Engine Oil meets or exceeds the requirements of:

- ACEA E7-04, E5-02, E3-96
- Caterpillar ECF-2, ECF-1-a
- Cummins CES 20077
- Global DHD-1
- MAN 271, 3275
- MTU MTL 5044 Type 2
- Diesel engines manufactured by OEMs not listed above, including International (Navistar), JohnDeere, Hino, Komatsu, Kubota and others

Features/Benefits

- Outstanding soot control for protection against abrasive wear and soot-induced oil thickening
- Excellent resistance to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Excellent wear protection
- High shear stability
- Excellent rust and bearing corrosion protection
- Good low-temperature pumpability, even with soot-laden oil
- Good resistance to foaming and aeration
- Extended drain capability for non-EGR diesel engines

Power-D® Engine Oil

| Typical Properties | |
|--|---------------|
| SAE Grade | 15W-40 |
| Specific Gravity @ 60°F | 0.880 |
| Density, lbs/gal @ 60°F | 7.33 |
| Color, ASTM D1500 | L 4.0 |
| Flash Point (COC), °C (°F) | 240 (464) |
| Pour Point, °C (°F) | -40 (-40) |
| Viscosity, Kinematic | |
| cSt @ 40°C | 117 |
| cSt @ 100°C | 15.2 |
| Viscosity Index | 135 |
| Cold Cranking Viscosity, cP @ -20°C | 6,400 |
| High-Temp/High-Shear Viscosity, cP @ 150°C | 4.3 |
| Sulfated Ash, ASTM D874, wt % | 1.50 |
| Total Base Number (TBN), ASTM D2896 | 11.8 |
| Zinc, wt % | 0.128 |

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.