

# **Heavy Duty Diesel Engine Oil**

Phillips 66® Heavy Duty Diesel Engine Oil is a high-quality universal fleet engine oil designed for use in on-highway diesel trucks and off-highway diesel equipment operating in moderate to hot climates. It also is recommended for passenger cars and light trucks with either diesel or gasoline engines where the OEM recommends SAE 20W-50 or 25W-50 engine oil.

Heavy Duty Diesel Engine Oil is formulated with advanced additive technology to provide outstanding wear protection, soot control and bearing corrosion protection. Excellent 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.

Heavy Duty Diesel Engine Oil meets or exceeds the performance requirements of API Service Categories CH-4 and SL. It is backward serviceable for use where API CG-4 or earlier "C" category engine oils are specified. It is not recommended for use in newer, low-emission diesel engines designed to meet 2004 and later exhaust emission standards.

### **Applications**

- 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

Heavy Duty Diesel Engine Oil is licensed for:

API Service CH-4, SL (25W-50 SL only)

#### Features/Benefits

- Excellent 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 resistance to foaming and aeration

# Universal Fleet Engine Oil





### **Heavy Duty Diesel Engine Oil**

| Typical Properties                         |            |           |
|--|------------|-----------|
| SAE Grade                                  | 20W-50     | 25W-50    |
| Specific Gravity @ 60°F                    | 0.877      | 0.884     |
| Density, lbs/gal @ 60°F                    | 7.31       | 7.36      |
| Color, ASTM D1500                          | L 4.0      | L4.0      |
| Flash Point (COC), °C (°F)                 | 242 (468)  | 242(468)  |
| Pour Point, °C (°F)                        | -27 (-17)  | -38(-36)  |
| Viscosity, Kinematic                       |            |           |
| cSt @ 40°C                                 | 190        | 192       |
| cSt @ 100°C                                | 20.0       | 20.3      |
| Viscosity Index                            | 125        | 124       |
| Cold Cranking Viscosity, cP @ (°C)         | 9,300(-15) | 5500(-10) |
| High Temp/High Shear Viscosity, cP @ 150°C | 4.1        | 4.1       |
| Sulfated Ash, ASTM D874, wt %              | 1.39       | 1.39      |
| Total Base Number (TBN), ASTM D2896        | 10.5       | 10.5      |
| Zinc, wt %                                 | 0.119      | 0.119     |

## **Health & Safety Information**

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

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