



## Heavy Duty Diesel Engine Oil

Medallion Plus® Heavy Duty Diesel Engine Oil is formulated with hydrocracked base stocks exhibiting synthetic blend properties, which counteract acids, varnishes and deposits to extend engine life and maintain peak efficiency. Medallion Plus Heavy Duty Diesel Engine Oil meets or exceeds the current and past API license requirements, is backward compatible with old formulations, and provides the protection required for today's newer engines, including EGR engines.

Medallion Plus Heavy Duty Diesel Engine Oil provides outstanding protection against scuffing of highly loaded cams, hydraulic lifters and other valve train components, resulting in reduced engine wear and increased engine efficiency and power. Medallion Plus Heavy Duty Diesel 15W-40 is an economical choice for fleets of diesel engines requiring an API Service Classification CK-4.

<u>PROPERTY</u>	<u>ASTM TEST METHOD</u>	<u>SAE 10W-30</u>	<u>SAE 15W-40</u>
Viscosity @ -25°C, cP	D-5293	6000	N/A
Viscosity @ -20°C, cP	D-5293	N/A	6000
Viscosity @ 40°C, cSt	D-445	78.00	115.00
Viscosity @ 100°C, cSt	D-445	11.80	15.1
Viscosity Index	D-2270	145	135
Flash Point, COC, °C	D-92	215	223
Flash Point, COC, °F	D-92	420	430
Pour Point, °C	D-97	-36	-33
Pour Point, °F	D-97	-33	-27
Color	D-1500	3.0	2.0
Gravity, °API	D-287	31.0	30.0
Sulfated Ash, %	D-874	1.0	1.0
Zinc, %	D-4951	0.13	0.13
Total Base Number (TBN)	D-2896	10	10

Meets or exceeds the following tests and requirements:

- API Service Classification – CK-4, CJ-4 (10W-30, 15W-40); SN, SM (15W-40)
- Caterpillar – ECF-2, ECF-3, C-13 (10W-30, 15W-40)
- Mack – EOS-4.5, EO-O Prem Plus '07, EO-N, T-11, T-12 (10W-30, 15W-40)
- Cummins – CES 20081, CES 20086 (10W-30, 15W-40)
- Detroit Diesel – DFS 93K218, DFS 93K222
- General Motors – 6.5L (RFWT)
- Navistar (International Harvester Company) – HEUI Foam
- Volvo – VDS-3, VDS-4, VDS-4.5 (10W-30, 15W-40)
- Global – DHD-1 (10W-30, 15W-40)
- JASO – DH-2 (10W-30, 15W-40)
- Mercedes Benz – P228.3 (15W-40)
- Daimler – MB 228.31 (10W-30, 15W-40)
- Renault – RLD-4, RLD-3 (10W-30, 15W-40)
- ACEA – E7-04, E2, E4, E9-2012 (10W-30, 15W-40)
- John Deere – Plus-50
- Ford – WSS-M2C171-E, WSS-M2C171-F1 (10W-30, 15W-40)