



UNIVERSAL DEZOL ENGINE OILS

Universal Dezol Engine Oils are formulated with hydrocracked base stocks exhibiting synthetic blend properties which counteract acids, varnishes and deposits to extend engine life and maintain peak efficiency. Universal Dezol Engine Oils meet or exceed the current and past API license requirements, are backward compatible with old formulations, and provide the protection required for today's newer engines, including EGR engines.

Universal Dezol Engine Oils provide 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. Universal Dezol 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</u>	<u>SAE 30</u>	<u>SAE 40</u>	<u>SAE 10W-30</u>	<u>SAE 15W-40</u>
Viscosity @ -25°C, cP	D5293	5000	N/A	N/A	6000	N/A
Viscosity @ -20°C, cP	D5293	N/A	N/A	N/A	N/A	6000
Viscosity @ 40°C, cSt	D445	39.00	98.40	137.00	78.00	110.00
Viscosity @ 100°C, cSt	D445	6.60	11.85	14.90	11.80	15.10
Viscosity Index	D2270	125	110	110	145	145
Flash Point, COC, °C	D92	215	243	246	215	223
Flash Point, COC °F	D92	420	470	475	420	430
Pour Point, °C	D97	-36	-29	-21	-36	-33
Pour Point, °F	D97	-33	-20	-6	-33	-27
Color	D1500	2.0	3.0	3.0	3.0	3.0
Gravity, °API	D287	30.3	28.6	28.0	31.0	30.0
Sulfated Ash, %	D874	0.9	0.9	0.9	1.0	1.0
Zinc, %	D4951	0.09	0.09	0.09	0.13	0.13
Total Base Number (TBN)	D2896	7.3	7.3	7.3	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); CF-2, CF (10W, 30, 40)
- Caterpillar – ECF-2, ECF-3, C-13 (10W-30, 15W-40); IM-PC (30W 40W)
- 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 – 6V92TA, 1% SASH (10W, 30W, 40W), DFS 93K218, DFS 93K222 (10W-30, 15W-40)
- General Motors – 6.5L (RFWT) (15W-40)
- Navistar (International Harvester Company) – HEUI Foam (15W-40)
- Allison – C-4 Transmission test demonstrated (10W, 30W)
- 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)

NOTE: Certain tests apply to specific SAE grades.

EO-3/06.06.17