



SHPD Engine Oils

Dyna-Plex 21C® SHPD Engine Oils are designed to extend drains in today's heavy duty diesel engines while providing outstanding engine protection. Dyna-Plex 21C SHPD oils incorporate base stocks exhibiting synthetic blend properties which provide high oxidation stability for petroleum oils. These base oils provide the lowest sulfur content with the highest saturate levels and enable oils to demonstrate oxidation characteristics comparable to high priced synthetics. These exceptional oxidation results contribute to SHPD's ability to fight degradation, allowing drain intervals to exceed usual limits. Dyna-Plex 21C SHPD Engine Oils are also formulated with the highest performance additive package technology available, allowing you to safely operate equipment longer between oil changes and increase your bottom line profits.

Dyna-Plex 21C SHPD Engine Oils meet or exceed the current and past API license requirements, are backward compatible with old formulations, and provide the protection required for newer 21st century engines, providing truly universal application flexibility.

<u>PROPERTY</u>	<u>ASTM TEST METHOD</u>	<u>SAE 10W-30</u>	<u>SAE 15W-40</u>	<u>SAE 20W-50</u>
Viscosity @ -25°C, cP	D-5293	6200	N/A	N/A
Viscosity @ -20°C, Cp	D-5293	N/A	5500	N/A
Viscosity @ -15°C, Cp	D-5293	N/A	N/A	6000
Viscosity @ 40°C, cSt	D-445	80.00	110.00	157.7
Viscosity @ 100°C, cSt	D-445	12.00	15.10	18.80
Viscosity Index	D-2270	145	145	125
Flash Point, COC, °C (°F)	D-92	221 (430)	232 (450)	241 (465)
Pour Point, °C (°F)	D-97	-36 (-33)	-33 (-27)	-21 (-6)
Color	D-1500	3.0	3.0	3.0
Gravity, °API	D-287	30.8	30.8	28.8
Sulfated Ash, %	D-874	1.0	1.0	1.0
Zinc, %	D-4951	0.13	0.13	0.13
Total Base Number (TBN)	D-2896	10	10	10
HT/HS, cP	D-4683	3.5	4.3	4.3
Kurt-Orbahn PVL		5%	9%	10%

Meets or exceeds the following specifications:

- API Service Classifications – CK-4, CJ-4, CI-4 Plus, CI-4 (10W-30, 15W-40); SN, SM (15W-40); CF, CF-2 (20W-50)
- 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)
- General Motors – 6.5L (RFWT) (15W-40)
- Navistar (International Harvester Company) – HEUI Foam (10W-30, 15W-40)
- 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 (10W-30, 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)
- Detroit Diesel – DFS 93K218, DFS 93K222 (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-2/06.12.17