

TECHNICAL DATA SHEET

Duralec Ultra

PRODUCT DESCRIPTION

Royal Purple® Duralec Ultra are high performance, heavy-duty diesel engine oils that are an outstanding performance upgrade for any diesel engine. Duralec Ultra combines premium base oils with Royal Purple's proprietary additive technology, Synerlec®, to create a high-performance diesel motor oil that optimizes engine performance and provides superior protection in rigorous on/off highway applications.

Duralec Ultra diesel engine oils contain Royal Purple's proprietary Synerlec additive technology, providing an even higher level of wear protection, efficiency, and resistance to thermal breakdown compared to API CK-4 requirements. Synerlec is Royal Purple's proprietary additive chemistry that greatly increases the protective film strength of the oil, reducing metal to metal contact, friction and wear. Synerlec also increases the oil's resistance to thermal degradation, reducing deposit formation and lengthening the oil's useful life.

FEATURES and BENEFITS

- MAXIMUM WEAR PROTECTION- Royal Purple's proprietary Synerlec additive technology prevents wear of piston rings, valve train, and other components beyond API CK-4 requirements
- EXCELLENT COLD FLOW PERFORMANCE- Helps minimize wear at start-up due to superior cold temperature properties
- OUSTANDING OXIDATION RESITANCE- Less thermal breakdown and degradation allows for longer oil drain intervals
- IMPROVES FUEL ECONOMY- A low coefficient of friction results in optimized fuel economy from the combination of premium synthetic base oils and Royal Purple's proprietary Synerlec additive technology
- ENHANCED DEPOSIT CONTROL- Advanced synthetic solvency reduces engine deposits and maintains engine cleanliness ensuring maximum performance

APPLICATIONS

Royal Purple Duralec Ultra is recommended for use in light duty & heavy duty trucks, off road equipment and fleet vehicle applications. This includes naturally aspirated, turbocharged, direct injection, indirect injection, and those engines running on ultra-low sulfur or biodiesel fuel formulations.



TECHNICAL DATA SHEET

SPECIFICATIONS

	10W-30	15W-40
API CK-4*	•	•
ACEA E7-16, E9-16	•	•
Allison TES-439		•
CAT ECF-3	•	•
Cummins CES 20086	•	•
Dailmer MB 228.31	•	•
Detroit Diesel DFS 93K222, 93K223	•	•
Deutz DQC III-10 LA, III-18 LA	•	•
Ford WSS-M2C171-F1	•	•
JASO DH-2	•	•
Mack EO-S-4.5	•	•
MTU Type 2.1	•	•
Renault RLD-3	•	•
Volvo VDS-4.5	•	•

X - Formally licensed / registered

PRODUCT DATA

Typical Properties			
Property	Test Method	10W-30	15W-40
Viscosity @ 40°C, cSt	ASTM D445	71.50	110.60
Viscosity @ 100°C, cSt	ASTM D445	11.09	15.46
Viscosity Index	ASTM D2270	146	147
Cold Crank Simulator, cP	ASTM D5293	4826 @ -25°C	3910 @ -20°C
HTHS @ 150°C, cP	ASTM D5481	3.3	3.9
Base Number, mg KOH/g	ASTM D2896	8.92	8.93
Sulfated Ash, wt%	ASTM D874	1.2	1.2
Pour Point, °C (°F)	ASTM D97	-45 (-49)	-45 (-49)
Flash Point, °C (°F)	ASTM D92	227 (440)	230 (446)
Density @ 15°C, g/mL	ASTM D4052	0.8761	0.8700

HEALTH and SAFETY

Health and safety recommendations for products can be found on the Safety Data Sheet (SDS) www.royalpurple.com

^{• -} Recommended for use / meets requirements

^{*}Backwards compatible with prior requirements