



THRIVE™ DIESEL High Performance Diesel Engine Oil

Description

THRIVE™ Diesel engine oils are formulated with the use of next-generation, fuel efficient additive technology. It meets or exceeds nearly all the next generation OEM specifications including those from Ford, Cummins, Detroit Diesel, Mack, Volvo, Renault, Mercedes, MAN and Deutz. It can be recommended for new engines requiring CK-4 fluid and is backward compatible with API CJ-4, CI-4+, CI-4, CH, and CG oils.

THRIVE™ Diesel engine oils offer increased fuel economy by using semi-synthetic base oils and advanced friction modifiers.

THRIVE™ Diesel engine oils are formulated exclusively with high purity Group II+ and Group III base stocks.

Features/Benefits

- ✓ **Increased fuel economy**
- ✓ **Reduced CO2 Emissions**
- ✓ **Superior Oxidation and Oil Consumption Control**
- ✓ **Enhanced Valve Train Wear Control**
- ✓ **Excellent Bearing and Ring Liner Wear Control**
- ✓ **Improved Control of Oil Thickening due to Soot Buildup.**

***THRIVE™ Diesel Engine Oils** exceed the rigorous industry engine performance requirements for the API Engine Oil Licensing and Certification System (EOLCS) and have been tested in accordance with the CMA code of practice.*

Physical & Chemical Properties	15W-40 CK-4	10W-30 CK-4
Product Numbers	067	057
API Gravity @ 60°F	29.3	31
Viscosity @ 100°C cSt/@ 40°C cSt	15.6 / 113.9	12.2 / 81.7
Flash Point, °C	226	237
Pour Point, °C	-33	-39
Viscosity Index	145	145
CCS Viscosity @ -20°C, cP max	5,500	6,200
HTHS Viscosity cP min	3.9	2.9
Sulfated Ash % wt. typical	1.0	1.0
Phosphorus % wt. typical	0.11	0.11
TBN	10.0	10.0

Performance Properties

Product Name	Product Number	Meets Performance Requirements of:
15W-40	067	API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4; API SN; Ford WSS-M2C171-F1; Cummins CES20086, CES20081; Volvo VDS-4.5, VDS-4; Detroit Diesel 93K222, 93K218; Mack EOS-4.5, EO-O, EO-M; Premium Plus 07, Premium Plus 03, Plus, JASO DH-2; Renault RLD-4, RLD-3; ACEA E7/E9; MB 228.31; MAN 3575; Deutz DQC III-10 LA; CAT ECF-3, ECF-2, ECF-1a, ACEA E7-04 Issue 2 (2007), MTU Type 2.1 PACCAR API CK-4
10W-30	057	API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4; Ford WSS-M2C171-F1; Cummins CES20086, CES20081; Volvo VDS-4.5, VDS-4; Detroit Diesel 93K222 (Approved), 93K218; Mack EOS-4.5, EO-O, EO-M; Premium Plus 07, Premium Plus 03, Plus, JASO DH-2; Renault RLD-4, RLD-3; ACEA E7/E9; MB 228.31; MAN 3575; Deutz DQC III-10 LA; CAT ECF-3, ECF-2, ECF-1a, ACEA E7-04 Issue 2 (2007), MTU Type 2.1 PACCAR API CK-4