

UNITED ECO-MAX

Product Description

Mineral Diesel Engine Oil formulated to meet heavy-duty oil API CK-4 criteria for heavy-duty-vehicles. This oil improves engine performance that are being addressed which includes oxidation stability, shear stability and aeration.

This oil not only meets API credentials, but also is also designed to meet the latest original equipment manufacturers (OEMs) performance specifications in appropriate grades and base stocks - including Caterpillar, Cummins, Detroit Diesel, Mack, Renault, Volvo, Mercedes-Benz, MAN, and Ford. It also meets the self-certifying requirements of ACEA E9.

Applications / Benefits

- * Better protect engines, minimizes oil consumption
- * Satisfying most diesel engine OEM oil demands
- * Hydro-treated base, inherent thermal-stability and anti-oxidation property
- * Provide better fuel economy, and reduce GHG emissions

Typical Characteristics

Test Description	Method	Unit	10W30	10W40	15W40
SAE Viscosity Grade	SAE J 300	-	10W30	10W40	15W40
Density @ 15 °C	ASTM D 4052	kg/L	0.875	0.872	0.877
Flash Point	ASTM D 92	°C	220	218	224
Pour Point	ASTM D 97	°C	-27	-30	-24
Kinematic Viscosity @ 40°C	ASTM D 445	cSt	82.7	103	111
Kinematic Viscosity @ 100°C	ASTM D 445	cSt	11.8	14.7	14.7
Viscosity Index	ASTM D 2270	-	135	148	136
TBN	ASTM D 2896	mgKOH/g	9.8	9.8	9.8
CCS	ASTM D 5293	cP	≤7000	≤7000	≤7000
HTHS	ASTM D 5481	cP	≥3.5	≥3.5	≥3.7

Specifications, Approvals & Recommendations

* API	CK-4
* API	SN IN SAE 10W40 & 15W40
* ACEA	E9
* ACEA	E7
* ALLISON	TES 439 IN SAE 15W40
* CATERPILLAR	ECF-3
* CUMMINS	CES 20086
* CUMMINS	CES 20081
* DETROIT DIESEL	DFS 93K222
* DETROIT DIESEL	DFS 93K218
* DEUTZ	DQC III
* FORD	WSS M2C171-F1
* JASO	DH-2
* MACK	EOS-4.5
* MACK	EO-O Premium Plus
* MACK	EO-N
* MAN	M3775
* MERCEDES BENZ	228.31
* MTU	Category 2.1
* RENAULT	RLD-4
* VOLVO	VDS-4.5

Reference No.
5142G2CK4REV0

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