



UNITED HYDRO 600 (SHPD)

Product Description

Hydrotreated Diesel Engine Oil formulated with today's diesel engine technologies which trends towards more environmentally conscious products with less gas emissions and longer overhaul periods. Coming along with these development, new devices like the Exhaust Gas Recirculation (EGR) rely much more on the performance of the engine oil being used. Using only the best hydrotreated base oil to maximize the protection under severe operating conditions, this product is well positioned to address those needs.

Blended from hydrotreated base stocks and a high technology core additive package, this product is truly an universal heavy duty diesel oil meeting the stringent European ACEA standard as well as American API performance. This product is simply the top player for both modern North American, and top-tier West European engines.

Applications / Benefits

- * Minimizes oil consumption
- * Satisfies most diesel engine OEM oil demands
- * Inherent thermal-stability and anti-oxidation property
- * Particularly suited for the modern diesel engine equipped with EGR

Typical Characteristics

Test Description	Method	Unit	10W30	10W40	15W40	15W50
SAE Viscosity Grade	SAE J 300	-				
Density @ 15 °C	ASTM D 4052	kg/L	0.867	0.871	0.874	0.875
Flash Point	ASTM D 92	°C	218	218	220	220
Pour Point	ASTM D 97	°C	-30	-30	-27	-27
Kinematic Viscosity @ 40°C	ASTM D 445	cSt	79.2	99.5	113.8	151.6
Kinematic Viscosity @ 100°C	ASTM D 445	cSt	11.8	14.8	15.1	19.3
Viscosity Index	ASTM D 2270	-	142	155	138	146
TBN	ASTM D 2896	mgKOH/g	11	11	11	11



Typical Characteristics

Test Description	Method	Unit	
SAE Viscosity Grade	SAE J 300	-	20W50
Density @ 15 °C	ASTM D 4052	kg/L	0.882
Flash Point	ASTM D 92	°C	244
Pour Point	ASTM D 97	°C	-18
Kinematic Viscosity @ 40°C	ASTM D 445	cSt	183.1
Kinematic Viscosity @ 100°C	ASTM D 445	cSt	19.8
Viscosity Index	ASTM D 2270	-	125
TBN	ASTM D 2896	mgKOH/g	11

Specifications, Approvals & Recommendations

	10W30	10W40	15W40	20W50
* API	CI4/SL	CI4/SL	CI4/SL	CI4/SL
* ACEA	E7	E7	E7	E7
* CATERPILLAR	ECF-2	-	ECF-2	-
* CATERPILLAR	ECF 1A	-	ECF 1A	ECF 1A
* CUMMINS	CES 20078	CES 20078	CES 20078	-
* CUMMINS	CES 20077	CES 20077	CES 20077	-
* DETROIT DIESEL	DDC 93K215	-	DDC 93K215	-
* DEUTZ	DQC III	-	DQC III	-
* DEUTZ	-	-	-	DQC II
* JASO	-	-	DH-1	DH-1
* MACK	EO-M PLUS	EO-M PLUS	EO-M PLUS	-
* MACK	EO-N	EO-N	EO-N	-
* MAN	M3275	M3275	M3275	-
* MERCEDES BENZ	228.3	228.3	228.3	228.3
* MTU	TYPE 2	TYPE 2	TYPE 2	-
* RENAULT	RLD-2	RLD-2	RLD-2	-
* VOLVO	VDS-3	VDS-3	VDS-3	-

Suggested for the following Uses

- * API CI-4/SL IN SAE 15W50