



UNITED HYDRO 200

Product Description

Hydrotreated Diesel Engine Oil designed to meet the lubrication requirements of most diesel engines. It provides outstanding protection for engines operating at high temperature.

This engine oil is a performance product which is optimized to provide maximum control of carbon deposit, minimum oil consumption and best neutralizing ability for not only new engine designs, but also some diesel engine types designed in the early 80's. Its high alkaline reserve neutralizes harmful combustion by-products when burning relatively low quality diesel with higher sulfur content. It also performs equally well in many types of gasoline engines, giving mix fleet operators a high performance product for widest usage coverage.

Applications / Benefits

- * Minimize oil consumption
- * Protects against ring and cylinder wear
- * Keeps piston clean
- * Neutralizes acids from high sulfur fuel

Typical Characteristics

Test Description	Method	Unit	40	50	10W30	10W40
SAE Viscosity Grade	SAE J 300	-				
Density @ 15 °C	ASTM D 4052	kg/L	0.885	0.892	0.869	0.866
Flash Point	ASTM D 92	°C	236	248	210	220
Pour Point	ASTM D 97	°C	-15	-12	-30	-30
Kinematic Viscosity @ 40°C	ASTM D 445	cSt	138.6	220.9	72.9	97.7
Kinematic Viscosity @ 100°C	ASTM D 445	cSt	14.8	19.5	11.2	14.8
Viscosity Index	ASTM D 2270	-	108	100	145	158
TBN	ASTM D 2896	mgKOH/g	10.2	10.2	10.2	10.2

Typical Characteristics

Test Description	Method	Unit	15W40	20W50
SAE Viscosity Grade	SAE J 300	-	15W40	20W50
Density @ 15 °C	ASTM D 4052	kg/L	0.877	0.879
Flash Point	ASTM D 92	°C	222	242
Pour Point	ASTM D 97	°C	-24	-18
Kinematic Viscosity @ 40°C	ASTM D 445	cSt	115.1	175.1
Kinematic Viscosity @ 100°C	ASTM D 445	cSt	15	18.8
Viscosity Index	ASTM D 2270	-	135	121
TBN	ASTM D 2896	mgKOH/g	10.2	10.2

Suggested for the following Uses

* API	CF-4/CF2/CF/SG
* ACEA	E1
* ACEA	E2
* ALLISON	C-3
* ALLISON	C-4
* CATERPILLAR	TO-2
* KOLOMNA	M-14D2
* MAN	270
* MERCEDES BENZ	228.0
* MERCEDES BENZ	228.1
* MIL	L-2104C
* MTU	TYPE-1