



Makina Grease & Lubricants Manufacturing L.L.C.

Super HD Plus

Description

Makinalube Super HD Plus engine oil is formulated to provide superior lubrication for both diesel and gasoline engines operating under heavy-duty service.

Makinalube Super HD Plus meets the requirements of most diesel and gasoline engine manufacturers. Makinalube Super HD Plus meets or exceeds the requirements of:

- API CF/SF, CD
- DETROIT DIESEL
- ACEA E1-96
- CCMC D4, PD2

Application

Makinalube Super HD Plus is formulated from highly refined base stocks and selected additives to meet or exceed the service requirements for motor oils, for both on and off highway use.

Makinalube Super HD Plus is recommended for use in diesel engines and automotive gasoline engines operating under either light or heavy-duty service. This oil is especially recommended for use in turbocharged diesel engines.

The use of Makinalube Super HD Plus will allow operators of more than one maker of equipment to stock one lubricating oil that will satisfy the warranty requirements of most engine manufacturers. Its high and stable Base Number of 12 provides excellent protection against formation of corrosive acids from high sulphur fuels.

Typical Characteristics

PROPERTIES	UNITS	TEST METHOD	VALUE					
SAE Grade		DIN 51 511	10W	20	30	40	50	60
Density @ 15 °C	kg/m ³	ASTM D-4052	884	858	894	901	905	900
Viscosity @ - 25 °C	mPa.s	ASTM D-5293	5000	-----	-----	-----	-----	-----
Viscosity @ 100 °C	mm ² /s	ASTM D-445	6.50	6.5	11.5	15.7	21.0	25
Viscosity Index		ASTM D-2270	102	102	105	99	97	106
Flash Point, COC	°C	ASTM D-92	230	230	246	242	246	250
Pour Point	°C	ASTM D-97	- 27	-18	- 18	- 12	- 9	-12
Sulphated Ash	% wt.	ASTM D-874	1.5	1.5	1.5	1.5	1.5	1.5
Base Number	mg KOH/g	ASTM D-2896	12	12	12	12	12	12