



Product Data Sheet

OPTIMA D1

Product Description:

Optima D1 diesel engine oil is specially formulated to address the need of an economic product that possesses strong performance for the often heavily loaded diesel engines of the past generation.

Optima D1 diesel engine oil 's viscosity and TBN value are optimized to enhance its performance at high temperature now commonly encountered in today's more powerful diesel engines. With exceptional high viscosity index, Optima D1 diesel engine oil gives better viscosity response towards temperature changes and therefore the engines can start much easier and oil can reach critical engine parts faster when the engine starts. The enriched and improved detergent contained in the Optima D1 diesel engine oil also reduces high temperature carbon deposit significantly, which in turn decreases oil consumption in long run. Higher base number of the product neutralizes acidic materials created during fuel combustion for longer run resulting in better protection from corrosion.

Applications / Benefits:

- ▣ Promotes engine protection.
- ▣ Recommended for both gasoline and diesel engines.
- ▣ Maintains engines at design operating temperature.
- ▣ Contains anti-wear and anti-corrosion additives.
- ▣ Reduces oil consumption

Typical Characteristics:

Test Description	Method	30	40	50	15W40	20W50
SAE Viscosity Grade	SAE J 300	30	40	50	15W40	20W50
Specific Gravity @ 15 °C	ASTM D 4052	0.874	0.881	0.889	0.872	0.877
Flash Point, °C	ASTM D 92	230	235	258	222	242
Pour Point, °C	ASTM D 97	-21	-18	-15	-27	-21
Kinematic Viscosity, cSt @ 40°C	ASTM D 445	100	138.6	210.3	115.1	175.1
cSt @ 100°C	ASTM D 445	11.5	14.8	19.1	15.0	18.8
Viscosity Index	ASTM D 2270	102	108	102	135	121
TBN, mgKOH/g	ASTM D 2896	6.7	6.7	6.7	6.7	6.7
Color	ASTM D 1500	<1.5	1.5	<2.0	<1.5	<1.5

Specifications, Approvals & Recommendations:

- API CD/SF

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