



# Product Data Sheet

## OPTIMA D3

### Product Description:

**Optima D3 Diesel Engine Oil, blended from hydro-treated base stocks and a high technology core additive package, is designed to meet the lubrication requirements of most diesel engines. It provides outstanding protection for engines at high temperature.**

Optima D3 Diesel 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 design, but also some diesel engine type designed in as early 80's. Its high alkaline reserve neutralizes harmful combustion by-products when engine burning relatively low quality diesel with higher sulfur content.

Optima D3 Diesel Engine Oil also perform equally well in many types of gasoline engine, giving mix fleet operators a high performance product for widest using coverage.

### Applications / Benefits:

- ▣ Better thermal stability and low pour point.
- ▣ Protects against ring and cylinder wear.
- ▣ Keeps piston clean.
- ▣ Neutralizes acids from high sulfur fuel.
- ▣ High performance both in diesel and gasoline engine.

### Typical Characteristics:

Test Description	Method	40	50	10W30	15W40	20W50
SAE Viscosity Grade	SAE J 300	40	50	10W30	15W40	20W50
Specific Gravity @ 15 °C	ASTM D 4052	0.885	0.892	0.871	0.878	0.883
Flash Point, °C	ASTM D 92	235	248	210	222	242
Pour Point, °C	ASTM D 97	-18	-15	-30	-27	-21
Kinematic Viscosity, cSt @ 40°C	ASTM D 445	138.6	220.9	72.9	115.1	175.1
cSt @ 100°C	ASTM D 445	14.8	19.5	11.2	15.0	18.8
Viscosity Index	ASTM D 2270	108	100	145	135	121
TBN, mgKOH/g	ASTM D 2896	10.0	10.0	10.0	10.0	10.0
Color	ASTM D 1500	<2.5	<3.0	<2.0	<2.0	<2.0

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## Suggested for the following uses:

- API CF4/CF2/CF/SG
- ACEA E1-96#2
- ACEA E2-96#5
- MIL-L-2104C; Kolomna M-14D2
- MAN 270
- MB 228.0 / 228.1
- Allison C-3 / C-4
- Caterpillar TO-2
- MTU Type 1

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