

ENOC VULCAN 990X EXLD

PRODUCT DESCRIPTION

ENOC VULCAN 990X EXLD is the latest API CK-4 performance heavy duty diesel engine oil. utilizing an advanced detergent synthetic technology (TBN Shield Formula) for long drain intervals

Leading features

- Meets the latest & most advanced heavy duty diesel specification API CK-4 along with latest global OEM specifications making it truly multi-fleet product.
- designed to deliver extended drain capabilities without compromising on engine durability leading to savings to fleet customers.
- ENOC Vulcan 990X EXLD 10W-40 has class leading TBN retention properties ensuring:
 - Long trans-border journeys with no fuel derived issues
 - Fleet management confidence over long drain intervals
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- ENOC Vulcan EXLD 10W-40 delivers long drain however with no compromise on:
 - Engine deposit control
 - Oil thickening protection
 - Corrosive wear control protection

Long Drain Intervals

Cost of Ownership



APPLICATIONS

- Suitable for heavy and light duty commercial vehicles meeting latest global emissions standards as well as older fleet vehicles.
- Suitable for Agricultural, mining and construction vehicles meeting EU stage IIIA, IIIB and IV and US Tier 4 emissions standards as well as older generation equipment.

PERFORMANCE STANDARDS

VULCAN 990X EXLD meets and exceeds the following International specifications:

API	CK-4	Caterpillar	ECF-3
ACEA	E6, E7, E9	MAN	M3477
Volvo	VDS-4.5	Renault Trucks	VI RLD-3
MB Approval	228.51	MTU	Type 3.1
MACK	EOS-4.5	JASO	DH-2
Deutz	DQC IV-10 LA	Cummins	CES 20081
Detroit Diesel	93K218		

Always follow equipment manufacturer's recommendations for required lubricant performance level and oil drain intervals.

BENEFITS

VULCAN 990X EXLD provides:

Will help end users reduce maintenance costs through

- Outstanding wear protection
- Superior Piston Cleanliness
- Excellent corrosion protection

Proven “TBN Shield” Formula in various demanding engine tests

OM 646LA Test evaluates oil ability to control oil thickening & wear using diesel with 5% Biodiesel as fuel in severe duty cycle.

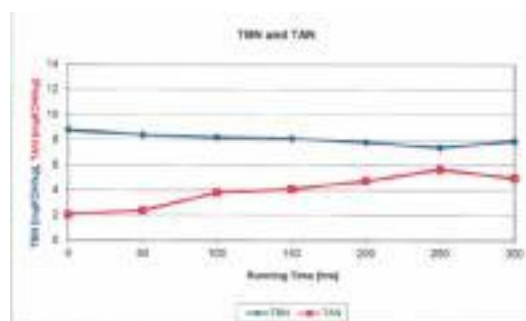


Figure 1 OM 646LA

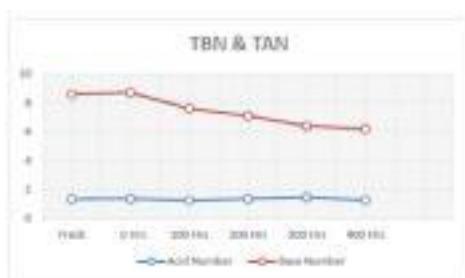


Figure 3 Volvo D12

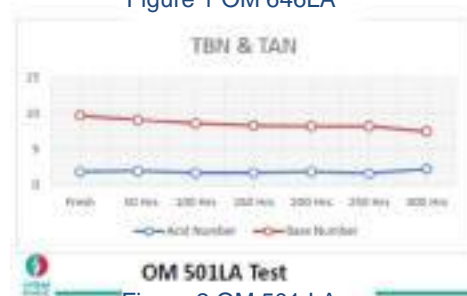


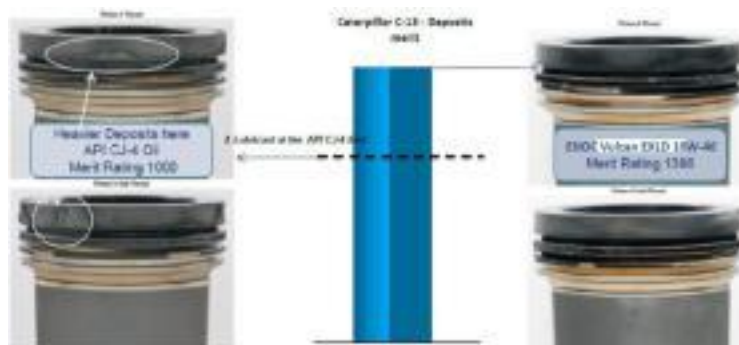
Figure 2 OM 501 LA

Volvo D12 is a severe long duration test to evaluate ability to provide oil consumption control & deposit performance.

OM 501LA Test evaluates engine oil's ability to provide protection against deposit, wear, turbocharger protection in severe conditions

In all different types of test, the TBNShield Formula ensures good oil condition as well as excellent engine performance

ENOC Vulcan EXLD 10W-40 exceeded the Caterpillar ECF-3 requirement by 38% in the C13 deposit control test. The Merit Rating was 1386 (Minimum required is 1000 for API CJ-4)



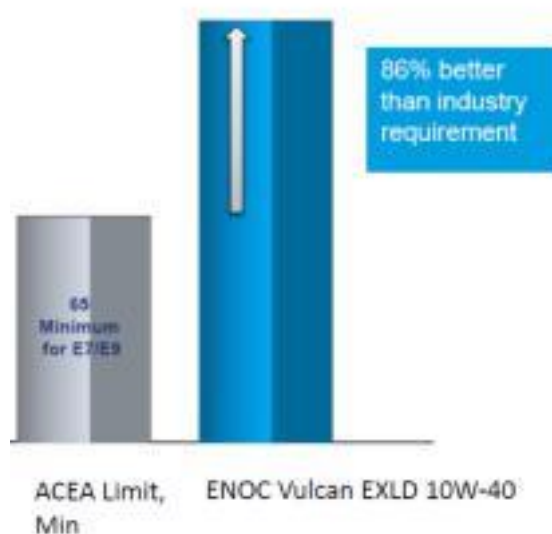


The Mack T-12 test establishes ENOC Vulcan EXLD 10W-40's ability to neutralize acid thus preventing corrosive wear for rings and liners with almost 50% performance reserve!

ENOC Vulcan EXLD 10W-40 provides robust oxidation protection as demonstrated in the CEC L-85-99, PDSC* Oxidation test

* PDSC: Pressure Differential Scanning Calorimeter
This is the CEC L-85-99 test for Hot Surface Oxidation required in ACEA E sequences

Induction Time by PDSC*, min



VULCAN 990X EXLD key points differentiation:

- Meets various OEM requirements – multifleet application with the latest API CK-4
- 50% better corrosive wear protection reserve*
- Long drain diesel engine oil with TBN Shield Formula
- 38% better engine deposit control
- 86% better oil oxidation performance reserve

TEST	TEST METHOD	RESULTS
SAE		10W-40
Appearance	Visual	Clear & Bright
Density @ 15°C, kg/L		0.8698
Kinematic Viscosity @ 100 C, mm ² /s	ASTM D445	13.6
Viscosity Index	ASTM D 2270	148
Base Number, mg KOH/g	ASTM D 2896	9.7
Pour Point, °C	ASTM D 6749	-36
Flash Point, °C	ASTM D 92	236
Product Code		200069

*The information prepared provides the typical properties that are considered as representative. Some variation which will not affect performance is possible

HEALTH AND SAFETY, ENVIRONMENT

The information on this product is available in the ENOC Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. For further information, we recommend you review the MSDS. Handled correctly there are no special precautions suggested.