

ONYX 89400

Heavy Duty Diesel Engine Oil Additive Package

DESCRIPTION

ONYX 89400 is a premium quality crankcase oil additive package which delivers class leading heavy duty diesel performance. It shows superb cleanliness performance in all critical areas of the engine. ONYX 89400 offers excellent oxidation and corrosion resistance, resulting to better viscosity control and hardware protection throughout extended drain.

RECOMMENDED DOSAGE & PERFORMANCE

At a recommended treat rate, the finished lubricant meets the following performance specifications.

Performance Level	SAE Grade	Dosage
ACEA E4/ E7-16 API CF DAF – EXTENDED DRAIN MB 228.5 MAN M3277 VOLVO VDS-3 MACK EO-N RENAULT RXD/RLD-2/RLD/RD-2	10W-40	20.5 Wt. %
ACEA E4/ E7-16 API CF DAF – EXTENDED DRAIN MB 228.5 MAN M3277 MTU OIL CATEGORY 3 VOLVO VDS-3 MACK EO-N RENAULT RXD/RLD-2/RLD/RD-2 DEUTZ DQC III-10 SCANIA LDF 3 DEUTZ DQC III-10 MTU OIL CATEGORY 3 CUMMINS CES 20072	10W-40	20.9 Wt. %
ACEA E4/ E7-16 DAF – EXTENDED DRAIN MB 228.5, MB 235.28 MAN M3277 MTU OIL CATEGORY 3 VOLVO VDS-3 MACK EO-N RENAULT RXD/RLD-2/RLD/RD-2 DEUTZ DQC III-10 SCANIA LDF 3 DEUTZ DQC IV-10 MTU OIL CATEGORY 3 CUMMINS CES 20072 VOITH RETARDER OIL-CLASS B FORD WSS-M2C212-A1	5W-30	20.2 Wt. %

PHYSICAL / CHEMICAL CHARACTERISTICS

Parameters	Test Methods	Specifications	Typical Value
Viscosity@ 100°C, cSt	ASTM D445	min 60	-
BN, mgKOH/g	ASTM D2896	min 70	74
Flash Point, °C	ASTM D93	TBR	200

GENERAL HANDLING INSTRUCTIONS:

Neoprene or nitrile rubber gloves and safety goggles should be worn for handling. Maximum handling temperature is 60°C. Material safety data sheet should be consulted for specific information and for information on health and safety.

Temperature Recommendations:

Unloading:	Temperature	
Pumping temperature	50°C	122°F
Maximum temperature	60°C	140°F
Storage:		
Maximum temperature for long term storage	45°C	113°F
Blending:		
Max. Base oil temperature for mechanical or in-line mixing	60°C	140°F

Equipment Recommendations:

Type of Pump	Positive Displacement
Type of transfer line	Ball lunched, Insulated, Steam Traced Using 107°C/225F Steam Max.
Transfer Line Size	2-3inch/5-8cm.

Heat Source:

Type	Steam 107°C/225°F max.
Storage Tank	Suction Heater Recommended