

#### **PRODUCT DESCRIPTION**

**LEAD YOTTA 15000** is an advanced fully synthetic heavy-duty diesel engine oil that helps extend engine life while providing long drain capability and potential fuel economy for modern diesel engines operating in severe applications. This product is formulated to deliver exceptional performance in modern and older hard-working engines. LEAD YOTTA 15000 is formulated to reduce pollutant emissions, such as HC, NOx, CO and particles and to protect and ensure longevity of post treatment anti-pollution systems, such as particulate filters (GPF, DPF) and three-way catalysts.

# APPLICATION

LEAD YOTTA 15000 CK-4 oils replace CJ-4 oils with the same viscosity grades and oil types (mineral/semi-synthetic/full-synthetic) and are backwards compatible down to CF-4 oils

This product meets or exceeds the requirements of the latest API and ACEA industry specifications for diesel engine oils, as well as the requirements of many major American, and European engine manufacturers.

## PERFORMANCE LEVELS

Meets and exceeds:

API CK-4/SN ; E6/E9/E7-16; 228.51; M3477; MTU 3.1; DQC IV-10LA; ECF-3 ; VDS 4.5; VDS 4; CES 20081; CES 20086; DDC 93K222 ; M3677 & Scania in progress.

#### **TYPICAL PROPERTIES**

PARAMETERS	TEST METHOD	UNIT	LEAD YOTTA 15000		
Viscosity Grade			10W30	10W40	15W40
Density @ 15°C	ASTM D1298	kg/l	0.855	0.855	0.85
Viscosity @ 100°C	ASTM D445	cSt	10.5	12	15.5
Viscosity @ 40°C	ASTM D445	cSt	60	68.5	116
Viscosity Index (min)	ASTM D2270	-	≥150	170	140
Cold Crank Simulator	ASTM D5293	сР	<6,600 @ -30 °C	<6,200 @ -35 °C	<6,600 @ -30 °C
Pour Point	ASTM D97	°C	-47	-45	-42
Flash Point	ASTM D92	°C	>230	>230	>230
Total Base Number (TBN)	ASTM D2896	KOH/g	10	10	10

The values shown above are typical values at the date of publication. Lead Petroleum reserves the right to change these typical values without prior notice

## HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further Information on Safety Guidelines please refer to MSDS available on our website <u>www.leadpetroleum.com</u>.