



MEDIUM-SPEED ENGINE OILS

Taro[®] XL Series**Description**

Taro XL Series lubricants are high-performance, high-BN, diesel engine oils for medium-speed trunk piston diesel engines. Taro XL Series lubricants are specially developed to use in medium-speed, trunk piston diesel engines burning residual fuels with a maximum sulphur level of 4.5%. Taro XL Series lubricants are blended from high-quality base oils and additives that provide an extra margin of protection against ring sticking, piston deposits and wear under the most severe operating conditions. Taro XL Series lubricants have very good viscosity control when used in severe high-temperature service, and their excellent BN retention characteristics prevent corrosive wear over long periods of operation. The unique detergent and dispersant additive system provides outstanding piston cleanliness as well as control of fuel contaminants. This results in extreme reduction of both "hot" (piston lands and grooves, piston undercrown, purifier preheaters) and "cold" (crankcase, cambox, rocker area, fuel pumps, purifier bowl) deposits. Taro XL Series lubricants provide a high degree of water tolerance and have good water separation and base retention properties.

Typical Test Data

	Taro 40 XL 40(X)*	Taro 50 XL 40(X)*
SAE Viscosity Grade	40	40
Base number, mgKOH/g	40	50
Density at 15°C, kg/l	0.91	0.92
Flash point, COC, °C	240	240
FZG test (A/8.3/90), failure load stage	12	12
Pour point, °C	-12	-12
Sulphated ash, mass %	4.9	5.9
Viscosity, kinematic, mm ² /s (cSt)		
at 40°C	135	135
at 100°C	14.0	14.0
Viscosity index	100	100

Recommended Uses

Taro XL Series lubricants are recommended for all types of trunk piston diesel engines burning residual fuels with a maximum sulphur level of 4.5%. Taro XL Series lubricants are approved by all major OEMs.

Performance Benefits**1. Wear Protection**

High BN levels control cylinder liner wear effectively and protect bearings from corrosion. High-performance, antiwear additives provide excellent protection against adhesive wear for cams, camshaft and bearings. Taro XL Series lubricants also provide a high degree of water tolerance and antifoam protection.

2. Detergent/Dispersant Properties

Keeps crankcases and oil control rings clean. Prevents deposit formation throughout the engine. Reduces lube oil filter blockage. Effectively handles insolubles.

3. Oxidation Stability

Oxidation inhibitors protect the oil against high thermal stresses, protect engine parts from corrosion and reduce undercrown deposits while promoting extended lubricant life.

4. Rust Prevention

Prevents corrosion of engine parts when the engine is not in operation.

5. Balanced Additive Combination

Provides minimum maintenance and downtime, long engine life and economical operating costs.

* Depending on the port designated, products may be delivered **with or without the (X) identifier** — e.g., Taro 40 XL 40X or Taro 40 XL 40 — however, the product typical test data both with or without the (X) identifier **are miscible and fully compatible**.