



Taro<sup>®</sup> Special HT LS 40 is a 40 BN SAE 50 cylinder lubricant particularly intended for cylinder lubrication of the latest generation crosshead engines using low sulphur fuel (<1.5 to 2 wt% sulphur) and operating at very high mechanical and thermal loads reaching up to 160 bar in maximum cylinder pressure and up to 270 degrees Celsius in liner temperature at top dead centre.

Taro<sup>®</sup> Special HT LS 40 is blended from highly refined, paraffinic base oils and carefully selected additives to provide superior ring and liner wear protection and effective piston cleanliness in low-speed crosshead engines.

Taro<sup>®</sup> Special HT LS 40 has been developed specifically for high-pressure and high-temperature applications.

## APPLICATIONS

Taro Special HT LS 40 is recommended for the cylinder lubrication of all crosshead type marine diesel engines continuously using low sulphur fuel and operating at high specific power outputs and high thermal loads.

Running on low sulphur fuel requires the reduction of base introduced into the cylinder. This can be achieved by optimizing the oil feed rate or selecting a diesel cylinder lubricant with a lower base number.

Taro Special HT LS 40 has been approved by MAN B&W and Wärtsilä for use in the latest generation engine designs.

## BENEFITS

- **Wear Protection**  
Provides protection against excessive cylinder liner and piston ring wear. The sulphur in marine fuels forms corrosive acidic products during combustion, even when its level is low. These acidic products not only attack engine parts like cylinder liners and piston rings, but also impair lubricating qualities of the oil. The base in Taro Special HT LS 40, provided by the alkaline additives, neutralizes the acidic products, thereby reducing wear and extending cylinder liner and piston ring life, thus allowing prolonged service intervals.
- **Detergent/Dispersant Properties**  
Works against ring sticking and minimizes deposit formation throughout the combustion chamber areas. This means extended maintenance intervals, and trouble-free operation with reduced maintenance costs.
- **Effective Lubrication Properties**  
Maintains an oil film under severe, high load conditions, thereby reducing frictional wear and preventing scuffing of liners, pistons and rings.
- **Storage Stability**  
A homogeneous product, completely stable at all ambient temperatures. Will not separate or deteriorate in long-term storage.
- **Compatibility**  
Fully miscible and compatible with recognized competitive alkaline cylinder lubricants generally known to the international marine trade.



### TYPICAL CHARACTERISTICS

Product Code	3003
SAE Grade	50
Base Number, D2896, mg KOH/g	40
Density at 15°C, kg/L	0.92
Flash Point, °C	> 250
Pour Point, °C	-15
Sulfated Ash, m%	5.1
Viscosity, cSt at 40°C cSt at 100°C	247 21.0
Viscosity Index	100

### PACK SIZES

205L

### ENVIRONMENT, HEALTH AND SAFETY

Users should consult the MSDS, follow the precautions outlined and comply with all laws and regulations concerning its use and disposal. Used packaging material should not be incinerated or exposed to flame. After use, protect your environment. Do not pollute drains, soil or water with used product.

### OTHER INFORMATION

For further information on Caltex products and services call the Lubelink Advisory Service on 1300 364 169 between 8.00am and 6.00pm (EST) Monday to Friday.

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