KunLun Marine Trunk Piston Engine Oil

DCB3015H、 DCB4015H

Product Introduction

PetroChina Lubricant Company's DCB3015H and DCB4015H Marine Trunk Piston Engine Oil is produced from the deep refined base oil which undergoes precise de-waxing process and a unique blending process by using our special overbased naphthenate as main additive and other additives such as anti-oxidation and etc. DCB3015H and DCB4015H have excellent detergency with good dispersant capability, anti-corrosion, and oxidation stability proven on bench test.

Application

KunLun Marine DCB3015H 、 DCB4015H Trunk Piston Engine Oil is suitable for use as lubrication for main propulsion and auxiliary marine trunk piston engine using heavy fuel oil with sulphur content less than 1.5%.

Feature

- Excellent detergency that reduces the buildup of soot, sludge and heavy fuel contaminants in critical parts of the engine

- Excellent oxidation stability at high temperature that prevents formation of unwanted oxides at high temperature and longer oil life

- Excellent anti-oxidation, anti-corrosion and good alkalinity that reduce corrosion and damage of cylinder and piston from combustion of high sulphur content fuel

- Excellent alkalinity stability / oxidation stability that prevents weaken of alkalinity over times. Provides protection to engine throughout entire oil life.

- Excellent anti-wear property that reduces abrasion under both high temperature and high pressure environment

- Excellent water resistance and separation capability for easy removal of contaminated water by centrifuge.

Field Test and Result

DCB4015H Marine Trunk Piston Engine Oil had undergone a 3,000 hours performance test on SULZER 6RTA52 engine.

- Abrasion and wear on primary and secondary cylinder, piston ring and pin, bearing and etc meet the standard of similar marine trunk piston engine oil from international brands.

- No visible ash formation at major formation parts of combustion chamber. Cylinder cleanliness and cam and jaw abrasion condition is similar to engine using similar marine trunk piston engine oil from others.

- No corrosion was detected on both moving and abrasive parts of primary and secondary engine.

- No emulsion occurs when water was introduced to primary and secondary engines' lubrication system during the 3,000 hours test run.

- No formation of submerge particles, floating particles and insolubility and etc problems when mixing DCB3015H / DCB4015H with any types of similar Marine Trunk Piston Engine Oil.

Specification

Properties		Typical		Testing Method
		DCB3015H	DCB4015H	
Kinematic Viscosity (100°C) mm^2/s		11.5	14.5	ASTM D445
TBN mg KOH/g		15	15	ASTM D2896
Viscosity Index		90	90	ASTM D2270
Flash Point ℃		238	238	ASTM D92
Pour Point ℃		-18	-15	ASTM D97
Mechanical Impurity %		0.008	0.008	GB/T511
Water Content %		Trace	Trace	ASTM D95
Sulphate Ash %		1.6	1.6	ASTM D874
Density 15°C Kg/m^3		893.1	903.1	ASTM D4052
Density 20°C Kg/m^3		890.0	900.0	ASTM D4052
Rust Test (Sea Water)		No Rust	No Rust	ASTM D665

Anti-Forming ml/ml
  24°C
  93.5^{o}C
  Later 24°C
		
		0/0
		10/0
		0/0
			
			0/0
			10/0
			0/0
				ASTM D892

Water Separation Property
  Purified Water ml
  Emulsifier ml
		
		1.4
		0.2
			
			1.4
			0.2
				SH/T0619

High Temperature Oxidation and Step Brass Corrosion (L-38)		Pass	Pass	ASTM D665
Potential Power(CL-100) grade		11	11	DIN51534

* Product specifications are subject to change without prior notice

Storage and Handling

- All storage equipments, tanks, pipes, valves and etc. apparatus has to be cleaned thoroughly and inspected to be clean for use before being used to transfer or transport DCB3015H / DCB4015H Marine Trunk Piston Engine Oil to prevent contamination.

- DCB3015H / DCB 4015H must be stored in dedicated storage tanks/equipment and is recommended to be stored in an indoor and controlled environment. Storage tanks/equipment must be waterproof, mist-proof and free from other mechanical particles.

- Product must be labeled clearly and properly during the entire transportation process to prevent mixing of other petrol-chemical product into the Marine Trunk Piston Engine Oil.