

AMALIE

Better than it has to be®
Since 1903



16 TBN MARINE ENGINE OILS

AMALIE 16 TBN Marine Engine Oils are high performance, high dispersancy engine oils for medium and high-speed diesel engines operating on distillate and marine diesel oil (MDO) fuels. These advanced diesel lubricants are available in both SAE 30 and 40 grades to suit most marine engine viscosity requirements. As a result of a special balance of dispersant and detergent properties, these oils provide not only increased resistance to cylinder liner lacquer formation and in severe service applications but also assist in sludge and deposit removal. Continued use of **AMALIE 16 TBN Marine Engine Oils** protect against high oil consumption associated with cylinder liner lacquering, improves overall engine cleanliness and can increase time between engine overhauls. Superior load carrying properties minimize piston ring and liner wear, and also makes these special lubricants suitable for marine gearing applications. Advantages experienced by our customers are found in the increased thermal and oxidation stability characteristic which results in improved engine cleanliness, reduced liner lacquering, reduced top deck sludge, reduced piston ring groove deposits and bore polishing. The superior wear protection extends the life of critical wear surfaces. Enhanced detergency and dispersancy capability leads to reduced deposits especially in the ring belt area. This has the advantage of extending time between cylinder overhauls and has the benefit of reduced oil consumption. In addition, the stay-in-grade shear stability reduces oil consumption and improves bearing protection. The high TBN levels prevent corrosive wear due to higher sulphur fuels. The excellent load carrying capability extends life of bearing surfaces.

In all, the broad range of engine applications, conserves inventory as it functions as the one severe service engine lubricant for all shipboard applications. **AMALIE** recommends using these marine engine oils in the following engines: MAN, BandW, and Caterpillar (3600 series), Deutz, and Wartsilla. These advanced diesel lubricants possess excellent water separation, rust and corrosion resistance properties. **AMALIE 16 TBN Marine Engine Oils** may also be used where API CF performance level is recommended.

30 TBN MARINE ENGINE OILS

AMALIE 30 TBN Marine Engine Oils meet the requirements of medium speed trunk piston engines used as the main propulsion and auxiliary engines on deep-sea vessels, as main propulsion engines on coastal and river ships, and in stationary power applications. **AMALIE 30 TBN Marine Engine Oils** are offered in SAE 30, SAE 40, and SAE 50 grades. They are designed to meet the needs of engines operating on heavy fuel. They are recommended for use in the latest model high power 2 and 4 cycle diesel engines. These oils are especially beneficial in engines having low crankcase oil consumption, or operating with low cylinder liner temperatures, and with fuels having moderate sulfur contents. These oils are formulated to provide excellent resistance to thermal degradation, and to promote a high level of engine cleanliness and protection against wear. They have good resistance to oxidation and viscosity increases over long operating periods. Relatively high alkalinity reserves in the oils provide superior protection, neutralizing strong acids resulting from elevated sulfur fuels that find access to the crank case to promote oil degradation, ring, cylinder, and bearing corrosion. These oils are formulated to eliminate under crown deposits, reduce piston ring belt deposits, and maintain camshaft spaces and crankcase cleanliness. It contains the industry leading thermal and oxidation stability for long oil life and good oil consumption control. These oils provide outstanding lube/fuel compatibility.

40 TBN MARINE ENGINE OILS

AMALIE 40 TBN Marine Engine Oils meet the requirements of medium speed trunk piston engines used as the main propulsion and auxiliary engines on deep-sea vessels, as main propulsion engines on coastal and river ships, and in stationary power applications. **AMALIE 40 TBN Marine Engine Oils** are offered in SAE 30, SAE 40, and SAE 50 grades. They are designed to meet the needs of engines operating on heavy fuel. They are recommended for use in the latest model high power 2 and 4 cycle diesel engines. These oils are especially beneficial in engines having low crankcase oil consumption, or operating with low cylinder liner temperatures, and with fuels having high sulfur contents. **AMALIE 40 TBN Marine Engine Oils** are formulated to provide excellent resistance to thermal degradation, and to promote a high level of engine cleanliness and protection against wear. They have good resistance to oxidation and viscosity increases over long operating periods. Relatively high alkalinity reserves in the oils provide superior protection, neutralizing strong acids resulting from high sulfur fuels that find access to the crank case to promote oil degradation, ring, cylinder, and bearing corrosion.

AMALIE 40 TBN Marine Engine Oils provide the following benefits when used as recommended: formulated to eliminate under crown deposits, reduce piston ring belt deposits, and maintain camshaft spaces and crankcase cleanliness. It contains the industry leading thermal and oxidation stability for long oil life and good oil consumption control. These oils provide outstanding lube/fuel compatibility.

50 TBN MARINE ENGINE OILS

AMALIE 50 TBN Marine Engine Oils meet the requirements of medium speed trunk piston engines used as the main propulsion and auxiliary engines on deep-sea vessels, as main propulsion engines on coastal and river ships, and in stationary power applications. These oils are premium, extra high performance 50 TBN engine oils designed for use in the most severe residual-fueled medium-speed diesel applications found in marine and stationary power industries. This diesel engine oil has been specially formulated to provide outstanding residual fuel compatibility characteristics for excellent engine cleanliness, especially in crankcase, camshaft areas, ring belt and piston under crown. It provides excellent high temperature oxidation and thermal stability, low volatility, and high load carrying properties and corrosion protection. They are designed to meet the needs of engines operating on heavy fuel. They are recommended for use in the latest model high power 2 and 4 cycle diesel engines. These oils are especially beneficial in engines having low crankcase oil consumption, or operating with low cylinder liner temperatures, and with fuels having high sulfur contents. **AMALIE 50 TBN Marine Engine Oils** are offered in SAE 30, SAE 40, and SAE 50 grades.

These **AMALIE 50 TBN Marine Engine Oils** are formulated to provide excellent resistance to thermal degradation, and to promote a high level of engine cleanliness and protection against wear. They have good resistance to oxidation and viscosity increases over long operating periods. Relatively high alkalinity reserves in the oils provide superior protection, neutralizing strong acids resulting from high sulfur fuels that find access to the crank case to promote oil degradation, ring, cylinder, and bearing corrosion. **AMALIE 50 TBN Marine Engine Oils** provide the following benefits when used as recommended: formulated to eliminate under crown deposits, reduce piston ring belt deposits, and maintain camshaft spaces and crankcase cleanliness. It contains the industry leading thermal and oxidation stability for long oil life and good oil consumption control. These oils provide outstanding lube/fuel compatibility.

70 TBN MARINE ENGINE OIL

AMALIE 70 TBN Marine Engine Oil is a premium crosshead cylinder oil for low-speed diesel engines normally operating at less than 350 rpm. It is recommended for applications where a premium grade cylinder lubricant is called for in use in all types of low-speed crosshead diesel engines burning residual fuels with sulfur contents of up to 3.5% weight. It is ideally suited for the new generation of highly rated, fuel efficient, slow-speed marine diesel engines operating with higher pressures, higher temperatures and longer strokes. It is a blend of highly refined, high viscosity index base oils, and additives that incorporate premium additive technology. Recommended applications include low-speed marine diesel engines burning heavy fuel with a relatively high sulfur content of between 1.0 to 3.5% weight for slow speed marine diesel engine cylinders. The performance features of this unique formulation centers around and additive technology that imparts outstanding acid neutralizing properties to counter corrosive wear resulting from the use of high sulphur fuels. This results in minimum deposit formation on cylinder ports, pistons, piston rings, ring grooves and under piston spaces. Advantages also include low cylinder and piston ring wear rates, excellent engine cleanliness, extended interval between maintenance schedules. This premium oil is offered in the SAE 50 viscosity grade.

MADE IN U.S.A.



MARINE ENGINE OILS

VISCOSITY	PACK SIZE	PART #
30 - 16 TBN	55 Gallon Drum	160-62433-05
30 - 30 TBN	55 Gallon Drum	160-69633-05
30 - 40 TBN	55 Gallon Drum	160-69333-05
30 - 50 TBN	55 Gallon Drum	160-69733-05
40 - 16 TBN	55 Gallon Drum	160-62443-05
40 - 30 TBN	55 Gallon Drum	160-69643-05
40 - 40 TBN	55 Gallon Drum	160-69343-05
40 - 50 TBN	55 Gallon Drum	160-69743-05
50 - 30 TBN	55 Gallon Drum	160-69653-05
50 - 40 TBN	55 Gallon Drum	160-69353-05
50 - 50 TBN	55 Gallon Drum	160-69753-05
50 - 70 TBN	55 Gallon Drum	160-69853-05



Always refer to your vehicles operating manual to select the correct grade of oil for your engine. The data presented herein are believed to be accurate; however, Amalie Oil Company shall not be liable for its content and makes no warranty with respect thereto.

