

## TECHNICAL DATA SHEET

## Marine Engine Oil 50 TBN

(September 2021 edition)

AMALIE Marine Engine Oil 50 TBN engine oils are marine engine oils that meet the requirement of medium speed trunk piston engines used as the main propulsion and auxiliary engines on deepsea 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 Marine Engine Oil 50 TBN 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 Marine Engine Oils 50 TBN** provides the following benefits when used as recommended. 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.

## Typical Physical and Chemical Properties

Marine Engine Oil	30 - 50	40 - 50	50 - 50
SAE Grade	30	40	50
TBN, mgKOH/g	50	50	50
API Gravity	24.0	23.5	23.0
Flash Point, °C	210	220	230
Kinematic Viscosity @100°C, cSt	11.75	14.75	17.80
Kinematic Viscosity @40°C, cSt	102.0	145.0	185.0
Viscosity Index	100	100	100
Pour Point, °C	-15	-12	-12
Sulfated Ash (%M)	6.5	6.5	6.5

Typical values are listed. Variations not affecting the performance of this fluid may occur during production, however; these variations will not fall outside of set specification parameters.

## **Health and Safety**

Safety Data Sheets (SDS) are available from your sales representative or at AMALIE.com.