

## TECHNICAL DATA SHEET

## Marine Engine Oil 40 TBN

(September 2021 Edition)

AMALIE Marine Engine Oil 40 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. AMALIE Marine Engine Oil 40 TBN 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. These 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 Marine Engine Oils 40 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 - 40	40 - 40	50 - 40
SAE Grade	30	40	50
TBN, mgKOH/g	40	40	40
API Gravity	28.5	28.0	27.5
Flash Point, °C	210	220	230
Kinematic Viscosity @100°C, cSt	11.80	14.60	17.90
Kinematic Viscosity @40°C, cSt	103.0	141.0	189.0
Viscosity Index	100	100	100
Pour Point, °C	-15	-12	-12
Sulfated Ash (%M)	5.2	5.2	5.2

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.