

## TECHNICAL DATA SHEET

## Marine Engine Oil 16 TBN

(September 2021 Edition)

AMALIE Marine Engine Oil 16 TBN engine oils are high performance, high dispersancy engine oils for medium and high-speed diesel engines oils 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 Marine Engine Oil 16 TBN protects 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 grove 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 Marine Engine Oil 16 TBN may also be used where API CF performance level is recommended.

## **Typical Physical and Chemical Properties**

Marine Engine Oil	30 - 16	40 - 16
SAE Grade	30	40
TBN, mgKOH/g	16	16
API Gravity	28.5	27.0
Flash Point, °C	230	230
Kinematic Viscosity @100°C, cSt	10.50	14.60
Kinematic Viscosity @40°C, cSt	90.00	141.0
Viscosity Index	100	100
Pour Point, °C	-20	-18
Sulfated Ash (%M)	2.2	2.2

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.