

## UNITED UNIMAR TBN 15

United Unimar TBN 15 marine lubricant is specially formulated engine oil for lubricating medium-speed trunk piston medium-speed diesel engines on board ships, coastal vessels, tugboats as well as land-based stationary power-generation equipment. United Unimar TBN 15 lubricant is suitable for use in engines burning residual fuels with a fuel sulfur content of up to 1.5% sulfur.

United Unimar TBN 15 lubricant contains a balanced additive composition used in conjunction with highly refined base oils to produce a product which imparts useful performance characteristics such as high load carrying capacity, good detergency and dispersancy properties, excellent rust and corrosion protection for all engine parts and strong alkalinity reserve to neutralize acids formed from the combustion of distillate fuels.

United Unimar TBN 15 is compatible with all medium-speed trunk-piston engine marine lubricants sold in the market and can be used for lubricating gear transmissions, turbo-chargers, oil lubricated stern tubes and other shipboard machinery.

### APPLICATIONS / BENEFITS

- Good oxidation stability.
- Good load bearing capacity.
- Good water shedding properties.
- Rust and oxidation protection.
- Strong acid neutralizing properties.
- Compatible with other competitive lubricants.

### TYPICAL CHARACTERISTICS

TEST DESCRIPTION	METHOD	TYPICAL RESULTS		
UNIMAR		315	415	515
SAE Viscosity Grade	SAE J 300	30	40	50
Specific Gravity @ 15 °C	ASTM D 4052	0.900	0.904	0.906
Flash Point, °C	ASTM D 92	230	240	250
Pour Point, °C	ASTM D 97	-9	-9	-9
Kinematic Viscosity @40°C	ASTM D 445	108	148	204
@100°C	ASTM D 445	11.8	14.5	18.2
Viscosity Index	ASTM D 2270	96	96	97
TBN, (mgKOH/g)	ASTM D 2896	15	15	15
Color	ASTM D 1500	<4.5	<4.5	<4.5