# **VOYAGER MARINE 450**

#### **DESCRIPTION**

VOYAGER MARINE 450 is a highly alkaline trunk piston engine oil for crankcase and cylinder lubrication requirement of medium-speed marine engines burning high sulphur residual fuels. It is a combination of high quality base oils and additives designed to impart acid neutralization, detergent, dispersant properties and oxidation stability.

#### **APPLICATIONS**

VOYAGER MARINE 450 is recommended as crankcase engine oil for medium speed engines operating on high sulfur fuels.

#### **BENEFITS**

#### PERFORMANCE LEVEL

- Excellent TBN retention with low oil consumption.
- Cleaner piston, ports and cylinder.
- Fast separation from water in case of water contamination.
- Extend oil life and drain intervals.
- Low under crown deposits.
- Control sludge formation.

## API ..... CF

### PRODUCT TYPICAL CHARACTERISTICS

| PROPERTIES       |         | UNITS    | VALUE  | TEST METHOD |
|------------------|---------|----------|--------|-------------|
| Product          |         | -        | 450    | -           |
| Specific Gravity | @ 15°C  | -        | 0.9030 | ASTM D-1298 |
| Viscosity        | @ 40°C  | mm²/s    | 142.0  | ASTM D-445  |
|                  | @ 100°C | mm²/s    | 14.0   | ASTM D-445  |
| Viscosity Index  |         | -        | 95     | ASTM D-2270 |
| Flash Point      | COC     | °C       | 260    | ASTM D-92   |
| Pour Point       |         | °C       | -9     | ASTM D-97   |
| Base Number      |         | mg KOH/g | 50     | ASTM D-2896 |
| Color            |         | -        | 3.5Dil | ASTM D-1500 |