

# GOLDENSTONE® MARINE DS

## Technical Data Sheet (TDS)

### MARINE DIESEL ENGINES

#### Description and Application

GOLDENSTONE® MARINE DS engine oils are formulated with carefully balanced high quality solvent refined and hydrotreated lube base stocks and an additive package exhibiting very good detergent and dispersant properties. The formulated lubricants meet the requirements of the major manufacturers of heavy duty marine diesel engines such as Pielstick, MAN B&W, MAN Augsburg, New Sulzer Diesel, Wartsila, etc.

GOLDENSTONE® MARINE DS oils are intended for the lubrication of main and auxiliary medium speed trunk-piston engines burning distillate fuels with up to 2.0 % sulphur. They are also fit for some other ship-board applications and marine engine reduction gears without any special demand to the lubricating oil.

#### Benefits

- Prevent formation of soot and black sludge in the oil
- Engine cleanliness
- Protection against cylinder liner wear and polishing
- Low foaming tendency
- Bearing corrosion protection
- Lower levels of piston ring wear

#### Specifications

SAE	30, 40, 50
API	CF

#### Typical Characteristics

Parameter	Test Method	Typical Value		
		GOLDENSTONE® MARINE DS 30/15	GOLDENSTONE® MARINE DS 40/15	GOLDENSTONE® MARINE DS 50/15
Density at 20°C, g/ml	EN ISO 3675	0.891	0.895	0.900
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s	EN ISO 3104	11.2	14.5	19.0
Viscosity Index	ISO 2909	97	96	93
Flash point COC, °C	EN ISO 2592	256	260	265
Pour point, °C	ISO 3016	-21	-18	-15
TBN (HClO <sub>4</sub> ), mg KOH/g	ASTM D 2896	15.0		
Sulfated Ash, %	EN ISO 3987	2.0		
Rust preventive Properties in the presence of distilled water	ISO 7120 Method B	PASS		
Foaming (Tendency/Stability), mL, - Seq. I at 24°C - Seq. II at 93.5°C - Seq. III at 24°C	ISO 6247	0/0 10/0 0/0		

Important note: typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

## Health, Safety and Handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

For more information about product MSDS, terms and conditions for storage and shelf life please visit:

<http://www.goldenstoneoils.com>

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