



Technical Data Sheet

- EXTRA PROTECTION FROM DEPOSITS AND CORROSION
- EXTENDED OIL LIFE

Pure Tech Marine Piston S4 40

Lubricants for medium-speed trunk piston engines

Pure Tech Marine Piston S4 40 is a multifunctional crankcase lubricant for highly rated medium-speed diesel engines operating on residual fuel. Pure Tech Marine Piston S4 40 has a BN of 40 and is designed for conditions of high oil stress. In addition Pure Tech Marine Piston S4 40 has been optimised to improve deposit control.

IMPROVED ENGINE OPERATION AND RELIABILITY

- **Extended oil life:** Marine Piston S4 40 is a BN 40 oil which has been optimised to resist oxidation and maintain BN in order to reduce the amount of oil sweetening that is required.
- **Engine protection:** Marine Piston S4 40 has a high level of detergency leading to exceptionally clean crankcase, valve deck and pistons. The formulation has been further optimised to reduce deposits in critical areas, e.g. piston undercrown.
- **System efficiency:** Marine Piston S4 40 has a high detergency/low dispersancy formulation in order to effectively release contaminants and water in centrifugal separators.

MAIN APPLICATIONS

Medium-speed industrial or marine propulsion and auxiliary engines, burning residual fuel oils, which create conditions of moderate oil stress. These conditions usually occur:

- In newer engine designs, less than 10 years old and/or fitted with flame rings.
- Where oil consumption is 0.5 - 1 g/kWh
- Where load factors are >85%
- Where fuels with sulphur >2% are in use

TYPICAL PHYSICAL CHARACTERISTICS

PROPERTIES		METHOD	MARINE PISTON S4 40	
SAE grade (viscosity class)			40	
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	127
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	13.7
Viscosity Index			ASTM D2270	104
Density	@15°C	kg/m ³	ASTM D4052	916
Flash Point (PMCC)		°C	ASTM D93	230
Pour Point		°C maximum	ASTM D97	-9
Base Number		mg /KOH/g	ASTM D2896	40
Sulphated Ash		% m/m	ASTM D874	5.0
Load Carrying Capacity (FZG Gear Machine)		Failure Load Stage	ISO 14635-1 A /8.3/90	11

HEALTH, SAFETY & ENVIRONMENT

Health and Safety

Pure Tech Marine Piston S4 40 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

