

Description

Marino 3 oils comprise a range of marine lubricants specially formulated for the lubrication of high and medium-speed 4-stroke diesel engines.

These oils are specially suitable for modern fast and semi-fast engines running on distilled and semi-distilled fuels with a sulphur content of up to 1% or Marine Diesel Oil (MDO).

Properties

- High detergent capacity that keeps the engine clean.
- Adequate alkaline reserve (TBN) that confers great capacity to neutralise the acids formed during combustion.
- Excellent thermal stability.
- Good filterability.

Quality levels

- API CF/CD
- MAN 270
- ACEA E2
- MTU Type 1
- MB 228.0

Technical specifications

	UNIT	METHOD	VALUE	
SAE Grade			30	40
Colour		ASTM D 1500	4.5	4.5
Density at 15 °C	g/cm ³	ASTM D 4052	0.892	0.897
Viscosity at 100 °C	cSt	ASTM D 445	11.9	14.9
Viscosity at 40 °C	cSt	ASTM D 445	105	148
Viscosity index	-	ASTM D 2270	98 min.	98 min.
Flash point, open cup	°C	ASTM D 92	215 min.	225 min.
Pour point	°C	ASTM D 97	-24	-21
TBN	mg KOH/g	ASTM D 2896	12	12
Sulphated ash	% weight	ASTM D 874	1.5	1.5

A safety data sheet is available on request.

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Technical data sheet for Lubricants. Revision 5. February 2014.