

PRO TP EXTRA SERIES (TP EXTRA 3030 / 4030 / 3040 / 4040)

TRUNK PISTON DIESEL OILS FOR MODERN, MEDIUM SPEED 4-STROKE MARINE ENGINES RUNNING ON RISIDUAL FUELS (RF)

DESCRIPTION

Pro TP EXTRA is a trunk piston engine oil specifically designed, with Group 2 base oils, for use in 4-Stroke medium speed diesel engines operating on residual fuels in marine, power generation and industrial applications. These oils are formulated with state-of-the-art Carboxylate technology and high purity hydroprocessed base oils, that have superior thermal and oxidative properties compared to conventional solvent refined oils used by most blenders. Group 2 base oils are also better at soot dispersancy that improves the oil life in service.

Pro TP Extra are available in SAE 30 & SAE 40, with a TBN 30 and TBN 40, respectively.

APPLICATIONS

- Pro TP EXTRA 3040 & 4040 are suitable for the engines operating on residual fuels (RF) having sulphur content in excess of 3.5%
- Pro TP EXTRA 3030 & 4030 are suitable for engines operating on residual fuels (RF) having sulphur content in excess of 2.5% and up to 3.5 %
- Pro TP EXTRA is also recommended for general lubrication of shipboard equipment where specialised lubricants are not required or uses of API CF quality oils are adequate.
- Please always refer to OEM recommendations for desired TBN values in relation to fuel sulphur contents.

PERFORMANCE LEVELS

OEM Status

Technology extensively tested by the leading manufacturers of medium speed, 4-stroke marine engines:

- Wartsila
- MAN
- MaK
- Yanmar
- Daihatsu
- HiMSEN

Additive system approvals include: Wartsila, MAN & MaK

FEATURES AND ADVANTAGES

- Blended with advanced additive system and hydrotreated base oils providing excellent reliability and extended drain.
- Advanced additive system, combined with hydrotreated base stocks, deliver several advantages:
 - 1. Thermally stable base oils capable of withstanding higher temperatures for long periods.
 - 2. Removes sulphur thereby reducing the formation of harmful acids during combustion.
 - 3. Improves oxidation stability of the base oils, increasing drain interval.
- Advanced Carboxylate technology delivers exceptional engine cleanliness and base number (TBN) retention.
- Additive technology tested in High Performance Marine Engine Laboratory (Rotterdam) in Gr I and Gr II
 base oils, followed by extensive field testing in collaboration with major OEM's.
- Additive technology is approved by all major OEM's.



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PRODUCT AND TECHNICAL DATA

PHYSICAL (CHARAC	TERISTICS
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Appearance	Bright, Clear	Bright, Clear	Bright, Clear	Bright, Clear
SAE GRADE	30	40	30	40
TBN, mg KOH/g	30	30	40	40
Viscosity @ 40 ° cSt	102	140	102	140
Viscosity @ 100 ° cSt	11.6	14.5	11.6	14.5
Viscosity Index	100	102	100	103
Pour Point, °C	-21	-18	-21	-18
Flash Point, °C	228	244	234	246
Density @ 15°C, kg/l	0.9	0.9	0.91	0.92
Sulphated Ash, % weight	3.9	3.9	5.2	5.2

GENERAL ADVICE

Further information on all Pro Oil SA lubricants is available from any Pro Oil SA office or from: www.prooil.co.za

These characteristics are typical of current production.

Whilst future production will conform to Pro Oil SA's specification, variations in these characteristics may occur.

Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet, which can be obtained from your Pro Oil SA representative.

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Although all reasonable care has been taken to ensure that the information contained in this publication is accurate as at the time of printing, such information is nevertheless liable to variation in the event of changes occurring subsequent to the date of printing it: the blend formulation, methods of storage, or due to the improper handling or application of any of the products referred to, or in the requirements of any specification or approval relating to any of the products.

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