

MAK MARINE X OILS

MAK MARINE X oils are formulated by using superior quality base oils and latest generation marine additive technology to withstand the severe stress encountered by the oil in modern marine engines designed for higher rated power output and efficiency. These lubricants are specially designed to handle the stressed condition in term of acid neutralization and sludge handling capability due to the use of inferior quality high sulphur residual fuel oils in large slow & medium speed marine engines used for power generation and propulsion.

They are recommended for all types of latest generation large capacity low and medium speed Trunk Piston Marine Engines operating on inferior quality high sulphur residual fuels and used for power generation and marine application. They are also suitable for use in engines with Anti-bore Polish Rings (APR).

- Excellent Base Number retention.
- Superior detergency ensures engine cleanliness.
- Very high thermo-oxidation stability.
- Exceptional sludge / dirt / soot handling capability.
- Good water tolerance & separability.
- High load carrying capacity.

The above characteristics ensure trouble-free performance, extended overhaul intervals and longer engine life.



Characteristics	ASTM	X 404	X 405
Appearance		Clear & Bright	Clear & Bright
Colour, Visual Observation		Brown	Brown
Density @15°C, gm/ml	D1298	0.9177	0.9268
K.V at 100° C, cSt	D445	14.4	14.5
Viscosity Index	D2270	101	101
Flash Point, (COC), °C	D92	232	235
Copper Corrosion @ 100°C for 3 hrs.	D130	la	la
Total Base Number, mg KOH/ gm	D2896	40	55

All the mentioned values are typical which may vary from batch to batch.

- Indoor Storage is always preferable.
- Barrels should be kept horizontally with bung position at 3 O'clock 9 O'clock position.
- Barrels should be kept away from dusty or heated areas.
- During handling any contact with dust must be avoided.

This grade is not hazardous under normal conditions of use. For further guidance Material Safety Data Sheet (MSDS) may be referred.

For any further advice on applications or otherwise, please contact the nearest Bharat Petroleum territory office or Technical Services department at the address given below.

Bharat Petroleum Corporation Ltd.

Product and Application Development Dept.

BPCL 'A' Installation, Sewree Fort Road, Sewree (East)

Mumbai -400015

E-mail: <u>MAKcustomercare2@bharatpetroleum.in</u>

Tel No.: 022-24176351