



# MARINE MTX

## Medium Speed Marine Diesel Oil

### Features

- **MARINE MTX** is approved by most modern medium-speed marine trunk diesel engine manufacturers, and they meet or exceed the following performance standards:
  - API CF
  - Caterpillar Series 3
  - US Mil-L-2104C
  - Petter W1

### Benefits

- Excellent water tolerance and separation
- Excellent resistance to thermal and oxidative degradation
- Good rust prevention ability
- Alkaline reserve to prevent corrosion
- Effective detergency to maintain system cleanliness
- World wide proven field service
- OEM approved

**MARINE MTX** are premium oils designed for the lubrication of the medium-speed trunk type diesel engines in marine service. These oils are blended from top quality paraffinic base oils for their stability and high natural Viscosity Index (VI). They provide an optimum balance of detergency, oxidation and corrosion resistance, water tolerance and wear prevention.

Trunk type engines use a single oil to lubricate the piston cylinder area as well as the crankcase and auxiliary equipment. This places a great deal of stress on the oil particularly because medium-speed engines are able to burn relatively dirty fuels which create a lot of acids and particulates. These contaminate the engine oil and quickly limit the oil's useful life unless some means were used to remove them. This is usually done with centrifuges which effectively separate soot, metal particles and water from the oil. **MARINE MTX** oils have been properly formulated so that centrifuges do not remove the beneficial additives at the same time.

The oil's alkaline reserve, measured by its Total Base Number (TBN), is used to neutralize the acids since centrifuging alone will not remove them. Engine oils in marine service are never changed; instead, fresh oil is added as oil is consumed in the cylinders. An equilibrium level of TBN is reached where the rate of addition of fresh oil balances the depletion rate of TBN in the existing oil, but this equilibrium level depends on the fuel sulfur level and on the TBN of the fresh oil. **MARINE MTX** offers a variety of TBN's to suit a wide range of fuel sulfur levels and oil consumption rates. Generally, 15 TBN oils are suitable for fuel sulfur levels up to 1.5%, 20 TBN oils are suitable for fuel sulfur levels up to 2.5%, and 30 TBN oils are suitable for fuel sulfur levels up to 3.5%.

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## Typical performance results

MARINE MTX NAME	1530	1540	2030	2040	3030	3040	4030	4040
ASTM COLOR (D-1500)	3.5	3.5	3	3.5	3.5	4.0	4.0	4.0
TBN (D-664)	15.4	15.2	20.3	20	30.1	29.8	40.1	39.8
SAE GRADE	30	40	30	40	30	40	30	40
VISCOSITY (D-445)								
cSt @ 40°C	109.4	138.9	104.39	142.31	102	142.2	99.8	139.5
cSt @ 100°C	11.8	13.7	11.58	14.1	11.15	14.2	11.6	14.2
VISCOSITY INDEX (D-2270)	96	95	98	95	103	97	104	99
POUR POINT (D-97) (°C)	-20	-21	-12	-6	-12	-6	-6	-6
FLASH POINT (D-92) (°C)	268	278	274	278	238	272	272	270
SULPHATED ASH (%WT.) (D-874)	1.65	1.65	2.7	2.7	3.9	3.9	5.25	5.25
FZG LOAD STAGE (DIN 51354, A/8, 3/90)	11	11	11	11	11	11	11	11

## Available sizes & part numbers

MARINE MTX	946mL (1 US quart)	3.78L (1 US gal)	18.9L Pail (5.0 US gal)	205 L Drum (54.2 US gal)	1000L Cube (264 US gal)	Bulk
1530				F0031850	F0031860	B0031801
1540				F0032650	F0032660	B0032601
2030				F0033150		B0033101
2040						B0033201
3030					F0032160	B0032101
3040					F0032260	B0032201
4030						B0040701
4040					F0050160	B0050101

Check with sales representative or website for the latest product approvals.



Lubricants

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