

MARINE STX

Stern Tube Lubricant



Features

- **MARINE STX** meets or exceeds the following industry standards:
- US Steel 222 and 224
- AGMA 250.04
- David Brown ET 33/80
- Non-lead formulation

Benefits

- Lead-free EP performance
- Excellent thermal and chemical stability
- Good water separation

MARINE STX oils are designed for the lubrication of heavily loaded marine bearings on main propeller shafts where they pass through the stern of the vessel.

The lubrication of stern tubes usually consists of supplying oil to the bearings under pressure just enough to counteract the pressure of the outside water. In this way water is prevented from flowing into the vessel through the bearing while oil consumption is minimized because oil is not leaking out through the bearings into the sea. The oil still has to be circulated through the bearings so that it can cool them and flush away any contaminants.

The stern tube lubricant therefore has to be able to prevent wear damage caused by heavy loads and also separate readily from water. Irving **MARINE STX** shows strong extreme pressure (EP) performance as shown by the Timken OK load and 4-Ball EP tests. These oils also have excellent thermal stability as shown in the US Steel 224 test (312 hours at 250°F). Special attention has been given to the oil's ability to resist the corrosion caused by the constant presence of seawater, a common contaminant in this oil's working environment. In tests done by a major bearing manufacturer, no corrosion was seen on standard steel ball bearings after 2 months immersed in the oil with 1% salt water at 100°C.

MARINE STX does not contain Lead.

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Typical performance results

ISO GRADE	320	460
AGMA GRADE	6 EP	7 EP
ASTM COLOR	3.0	3.5
DENSITY @ 15°C (kg/l)	.900	0.904
VISCOSITY (D-445)		
cSt @ 40°C	317.1	452.5
cSt @ 100°C	24.1	30.4
VISCOSITY INDEX (D-2270)	96	96
POUR POINT (D-97) (°C)	-6	-3
FLASH POINT (D-92) (°C)	296	298
TIMKEN OK LOAD (Kg) (D-2782)	34	35
4-BALL EP (D-2783)		
WELD POINT (Kg)	250+	250+
RUST PREVENTION (D-665)	PASS	PASS
FOAM PREVENTION (D-892)	0-0-0	0-0-0
DEMULSIBILITY		
Mins. to separate 30mL, at 82.2°C	3	3

Available sizes & part numbers

	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
MARINE STX 320				F0019150		
MARINE STX 460				F0028850		

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



Lubricants

www.irvinglubricants.com