

MARINE F

Diesel Engine Oils for Fishing Boat and Lifeboat

MARINE F SERIES is a lubricant which is developed especially to meet several use conditions of diesel engine for fishing boat, which is becoming high power. It is a high quality diesel engine lubricant formulated with highly refined paraffinic base oils and selected additives such as detergent-dispersant, oxidation inhibitor and anti-wear agent, etc. Also, multi-grade type lubricant, which can facilitate the start of the engine in the cold districts, is most suitable for a lifeboat diesel engine.

● FEATURES

- MARINE F SERIES** provides high thermal and oxidation stability and also excellent detergency, which can prevent the trouble of engine to extend the engine life.
- MARINE F SERIES** has good performance as a lubricant of the clutch for the engine with wet clutch.

3. MARINE F SERIES meets the requirements of API Service Category CF.

● CONTAINERS

200-liter drums, 20-liter pail cans

● TYPICAL PROPERTIES of MARINE F SERIES

SAE viscosity grade		10W-30	15W-40	30	40
Appearance		Brown liquid	Brown liquid	Brown liquid	Brown liquid
Density (15°C)	g/cm ³	0.882	0.891	0.895	0.900
Flash point (COC)	°C	230	238	252	264
Kinematic viscosity (40°C)	mm ² /s	73.8	115	101	146
	(100°C)	mm ² /s	11.2	14.8	11.5
Viscosity index		143	133	101	99
Pour point	°C	-37.5	-30.0	-25.0	-15.0
Acid Number	mgKOH/g	1.9	1.9	1.7	1.7
Base number (perchloric acid method; ASTM D 2896)	mgKOH/g	15	15	13	13

Note: The values of typical properties are subject to change based on revisions of the product without notification. (April 2009)



Handling Precautions

(MARINE F series)

▼ Please handle this product with care in accordance with the following precautions.

Composition :	Base Oil, Additives
Precautionary pictograms:	Not applicable
Signal word:	Not applicable
Hazard Statement:	Not applicable
Precautionary Statements:	
Prevention	<ul style="list-style-type: none">• Do not handle until all safety precautions have been read and understood.• Wear protective gloves/protective clothing/eye protection/face protection.• Do not allow the eyes to become exposed to the product. Do not swallow the product.• Wash hands thoroughly after handling.• Do not eat, drink or smoke when using this product.
Response	<ul style="list-style-type: none">• IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.• IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.• If the eyes are exposed to the product: Rinse the eyes with plenty of running water and immediately contact a physician.• IF ON SKIN: Wash with plenty of soap and water.
Storage	<ul style="list-style-type: none">• The product must be stored in a cool, well-ventilated location where it will not be exposed to direct sunlight.• Containers that have been opened must be tightly sealed.
Disposal	<ul style="list-style-type: none">• Dispose of contents/container in accordance with local/regional/national/international regulations.• If there are any doubts about proper methods of handling the product, contact the point of purchase before proceeding with usage.