

OUT BOARD

2 cycle engine oil for outboard motor

Outboard (outboard motor) engine is operated under repetition of full load and idling, and thus it is in extremely severe lubrication state. **OUT BOARD** is a lubricating oil for outboard motors, which is formulated with carefully selected mineral base oil and ashless dispersant excellent in low temperature detergency. **OUT BOARD** prevents seizure of outboard engines and fully draws out engine performance even under harsh operating conditions.

● Special Features

1. It is a 2 cycle outboard motor oil to fully draw out the performance of the outboard motor.
2. It has excellent cleanliness that suppresses deposits on combustion chamber which cause engine trouble.
- 3 It prevents trouble caused by deposits on piston head, cylinder head etc., such as increase in compression ratio, piston overheating and abnormal combustion due to surface ignition.
4. It exerts outstanding lubrication performance even in harsh long-term driving.
5. Most concern trouble for outboard motor is the misfire of the plug during cruising. A large amount of combustion products adhere to the spark plug forming a bridge and cause a misfire. Since **OUT BOARD** has no spark plug fouling, it prevents misfire and at the same time greatly prolongs plug life.
6. In the outboard engine, moisture (water) is mixed in the oil. Corrosion of the bearings may become a problem together with oxides in the blow-by gas. **OUT BOARD** has been confirmed that there is no problem at all in this respect.
7. For pre-mix lubrication system, recommended gasoline/oil mixing ratio is 25 ~ 30/1.

● Containers

200-liter drum, 20-liter pail can, 4-liter can (6 pieces) and 1-liter can (20 pieces)

● Typical Properties of OUT BOARD

SAE viscosity grade			20
Color	(ASTM)		L1.5
Density	(15°C)	g/cm ³	0.880
Viscosity	(40°C)	mm ² /s	57.0
	(100°C)	mm ² /s	8.45
Viscosity index			120
Flash point	(COC)	°C	150
Pour point		°C	-35
Acid number		mgKOH/g	0.91
Base number(D2896)		mgKOH/g	6.7
Sulfated ash		mass%	0.0
Element, N		mass%	0.42

Note: The typical properties may be changed without notice. (March 2018)



Handling Precautions

▼ Follow these precautions when handling this product.

Composition :	Base Oil(s), Kerosine, Additives
Precautionary pictograms:	
Signal word:	Warning
Hazard Statement:	Causes skin irritation May cause allergic skin reaction Suspected of causing cancer Harmful to aquatic life
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.• Contaminated work clothing should not be allowed out of the workplace.• Avoid breathing dust/fume/gas/mist/vapours/spray.• 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.• Avoid release to the environment.• Take off contaminated clothing and wash before reuse.• If skin irritation occurs : Get medical advice/attention.
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.