

ONYX 69000

Marine Trunk Piston Engine oil & System Oil Additive

DESCRIPTION

ONYX 69000 is a versatile core additive package designed for use in combination with ONYX 69300 or ONYX 69800 to formulate Trunk Piston Engine oils (TPEO) and System Oils (SO). When used with ONYX 69300, the combination is ideally suited for formulating low oil consumption trunk piston engine oils for modern marine and power generation engines running on distillate or residual fuel. ONYX 69000 can be blended with ONYX 69800 to formulate marine system oils for two-stroke crosshead engines.

DOSAGE

ONYX 69000 can be used at a treat rate of 1.5 Wt% along with ONYX 69300 to blend TPEO to the required base numbers.

ONYX 69000 Wt.%	ONYX 69300 Wt.%	TBN (mg KOH/g)
1.5	4.1	12
1.5	5.1	15
1.5	6.7	20
1.5	10.2	30
1.5	13.5	40
1.5	17.0	50
1.5	18.8	55

PHYSICAL / CHEMICAL CHARACTERISTICS

Parameters	Test Methods	Specifications	Typical Value
Viscosity@ 100°C, cSt	ASTM D445	Report	25
Zinc, % Wt	ASTM D4951	3.20 – 4.80	4.0
Phosphorus % Wt	ASTM D4951	2.70 – 4.10	3.45
Nitrogen % Wt	ASTM D5291	0.50 – 0.79	0.66
Flash Point (PMCC), °C	ASTM D93	Report	200
Specific Gravity @15.6 °C	ASTM D1298	Report	0.998

GENERAL HANDLING INSTRUCTIONS

Neoprene or nitrile rubber gloves and safety goggles should be worn for handling. Maximum handling temperature is 65°C. Material safety data sheet should be consulted for specific information and for information on health and safety.

Temperature Recommendations

Unloading:	Temperature	
Pumping temperature	60°C	140°F
Maximum temperature	65°C	149°F
Storage:		
Maximum temperature for long term storage	45°C	113°F
Blending:		
Max. Base oil temperature for mechanical or in-line mixing	65°C	149°F

Equipment Recommendations

Type of Pump	Positive Displacement
Type of transfer line	Ball lunched, Insulated, Steam Traced Using 107°C/225F Steam Max.
Transfer Line Size	2-3inch/5-8cm.

Heat Source

Type	Steam 107°C/225°F max.
Storage Tank	Suction Heater Recommended