



Marine & Large Engines Oils

hyrax[®] SAMUDRA DF SERIES



Description

Hyrax Samudra DF series oils are premium quality cylinder and crankcase oil specially formulated for use in highly rated medium speed trunk-piston marine diesel engines (marine or stationary service) which are designed to operate on distillate fuels or light fuel blends with sulphur content up to 1.0 % by weight operating under severe working conditions.

Hyrax Samudra DF series oils are manufactured using high quality base oils and advanced additive system to ensure excellent engine cleanliness, permits excellent high temperature oxidation and thermal stability, and high level of wear and corrosion protection.

Applications

Hyrax Samudra DF12 series oils are highly recommended for the lubrication of medium speed trunk piston engine running distillate fuels or light fuel blends. It also suitable for use as crankcase oil (system oil) in large crosshead low speed engine burning high sulphur fuels which specify 12 TBN oil.

Benefits

- 12 or 15 TBN alkalinity with good retention characteristics to ensure excellent protection in neutralizing strong acids formation from high sulphur fuel to minimize oil degradation and prevent ring, cylinder and bearing corrosion
- Provides significantly greater engine cleanliness – protects against varnish building and sludge formation on critical engine parts
- Excellent high temperature deposit control especially in the piston undercrown and piston ring belt area to maintain and optimize high engine power output efficiently

Typical Characteristics

Properties	Method	DF12		DF15	
		312	412	315	415
SAE Grade	SAE J 300	30	40	30	40
Density at 15°C, Kg/L	ASTM D4052	0.901	0.905	0.903	0.906
Flash Point, °C	ASTM D92	>240	>250	>240	>250
Viscosity at 40°C, cSt	ASTM D445	105.0	147.0	102.0	147.0
Viscosity at 100°C, cSt	ASTM D445	11.7	14.7	11.5	14.8
Viscosity Index	ASTM D2270	99	99	99	100
TBN, mgKOH/g	ASTM D2896	12	12	15	15

Performance

- API CF



Advanced additive system to ensure excellent engine cleanliness

12/15
TBN
alkalinity

Excellent protection in neutralizing strong acids formation



Protects against varnish building and sludge formation



Excellent high temperature deposit control