



ENERGOL IC-HFX

Crankcase Lubricants for Medium-speed Diesel Engines

P/L/385

Description

Energol IC-HFX is a range of high performance crankcase oils intended for use in medium speed trunk piston diesel engines burning residual fuel. They are also suitable for the lubrication of most reduction gears used with medium speed trunk piston engines.

A choice of four Total Base Numbers is offered, to cover the range of demands imposed by variations in service severity due to residual fuel quality, oil consumption rates and manufacturers' recommendations.

Energol IC-HFX improves on all the performance characteristics and is fully compatible & miscible with all existing grades of Energol IC-HF oils.

Main Benefits

- Detergency/dispersancy to ensure an excellent level of engine cleanliness and minimum piston deposits.
- Improved piston ring pack condition with reduced propensity to blow-by.
- High thermal & oxidation stability to prolong service life.
- Excellent water-rejection and minimal additive depletion.
- High level of gear lubrication performance (FZG stage 11).
- Alkalinity to neutralise the acidic products of combustion.

Applications

Energol IC-HFX oils are intended for the crankcase and cylinder lubrication of medium speed trunk piston diesel engines operating on high sulphur residual or distillate fuels.

Typical Characteristics

	Test Method	Units	ENERGOL IC-HFX			
			303	304	403	404
Density @ 15°C	ASTM D1298	Kg/l	0.932	0.935	0.932	0.940
Flash Point	ASTM D92	°C	230	246	230	250
Kin Viscosity @ 40°C	ASTM D445	cSt	118	155	118	153
Kin Viscosity @ 100°C	ASTM D445	cSt	11.5	13.9	11.5	13.9
Viscosity Index	ASTM D2270		81	83	81	85
Pour Point	ASTM D97	°C	- 15	- 9	- 15	- 9
Total Base Number	ASTM D2896	mgKOH/g	30	30	40	40
Sulphated Ash	ASTM D874	% wt	4.0	4.0	5.2	5.2

The above figures are typical of those obtained with normal production tolerances and do not constitute a specification.

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Classification & Approvals

These oils conform to the performance levels of the API CD classification, and are, therefore, suitable for the lubrication of highly rated medium and high speed diesel engines operating on high sulphur fuel.

Energol IC-HFX is fully approved by New Sulzer Diesel, MAN B & W, Wartsila and Pielstick for their range of engines.

Service Precautions

Energol IC-HFX is a highly dispersant oil and should NOT be water washed.

Storage

All packages should be stored under cover. Where outside storage of drums that would trap rainwater is unavoidable, they should be horizontal so as to avoid the possible ingress of water and the obliteration of drum markings.

Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

Health, Safety and Environment

Health, safety and environmental information is provided for these products in the Material Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

The British Petroleum Company p.l.c. or its subsidiaries will not accept liability if the products are used other than in the manner or with the precautions or for the purpose/s specified. Before the products are used other than as directed, advice should be obtained from the local BP office.