



# IC-HFX

## Trunk Piston Diesel Crankcase Lubricant

### Applications

IC-HFX is a premium grade trunk piston engine lubricant formulated to provide superior performance in highly rated marine diesel engines.

IC-HFX is recommended for medium speed trunk piston engines burning residual fuel, where system and engine operational conditions require excellent cleanliness control. It is particularly suitable to overcome 'black paint' and its associated problems. The term 'black paint' is used to describe excessive build-up of deposits on engine crankcase walls, camboxes and rocker boxes. It is generally found in engines burning heavy fuel oil.

It is recommended that IC-HFX should be continuously centrifuged and/or filtered in accordance with manufacturers' instructions. Additionally it is important that engine manufacturers' oil change intervals are observed. On no account should IC-HFX be water washed. IC-HFX is compatible and miscible with existing IC-HF grades.

It is also suitable for the lubrication of most reduction gears used with medium speed engines.

### 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
- Promotes low rates of piston and liner wear

- High level of gear lubrication performance (FZG Fail Stage 11).
- Alkalinity to neutralise the acidic products of combustion
- Excellent water-rejection and minimal additive depletion

### Specifications

IC-HFX is fully approved by the major trunk piston engine manufacturers including:

New Sulzer Diesel, MAN B&W, Wärtsilä and Pielstick.

### Storage

All packages should be stored under cover. Where outside storage of drums, that would trap rainwater is unavoidable, they should be in a horizontal position, 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 this product in the Materials Safety Data Sheet. This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

BP Australia Limited or its subsidiaries will not accept liability if the product is used other than in the manner or with the precautions or for the purpose/s specified. Before the product is used other than as directed, advice should be obtained from the local BP office or consult the BP Lubricants and Fuels Technical Helpline on 1300 139 700.

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### Typical Characteristics

Grade:	IC-HFX		303	304	403	404
Mnemonic:			ICHFX303	ICHFX304	ICHFX403	ICHFX404
Product Code:			306277	306289	306290	306307
	Test Method	Units				
SAE Viscosity			30	40	30	40
Density @ 15 °C	ASTM D1298	kg/L	0.906	0.910	0.911	0.915
Flash Point (PMC)	ASTM D93	°C	230	232	224	228
Kinematic Viscosity						
@ 40 °C	ASTM D445	cSt	103	138	101	137
@ 100 °C	ASTM D445	cSt	11.5	14.0	11.5	14.0
Viscosity Index	ASTM D2270	-	99	98	100	99
Pour Point	ASTM D97	°C	-6	-6	-6	-6
Total Base Number	ASTM 2896	mgKOH/g	30	30	40	40
Sulphated Ash	ASTM D874	% mass	3.7	3.7	5.0	5.0
Total Acid Number	ASTM D664	mgKOH/g	1.1	1.1	1.3	1.0

FZG Gear Test	IP 334	fail load stg	11	11	11	11
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*The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.*

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