

## Energol CL 505

### Crosshead Engines Cylinder Lubricant

#### Description

The name **CL 505** stands for "Cylinder Lubricant – 50 BN, SAE 50".

**Energol CL 505** is a high performance marine diesel engine cylinder lubricant for two-stroke crosshead engines running on low-sulphur fuels (such as will be required for prolonged operation within the forthcoming 'Sulphur Emission Control Areas' designated by IMO).

#### Application

**Energol CL 505** is a 50 BN cylinder lubricant for the following applications:

- Prolonged operation on low-sulphur fuel (distillate or heavy fuel < 1.5% S),
- In-service running-in (distillate or heavy fuel),
- Sea trials, and
- Test bed running-in.

**CL 505** is positioned at a BN level to complement other BP Marine cylinder oils, to meet certain customers' requirements for a high performance moderate BN oil to help their flexibility when switching between low and medium sulphur fuel without having to change cylinder oil type/BN.

In summary: **Energol CL 505** prospectively covers a wider range of fuel sulphur level than a 40BN oil; it is a highly attractive grade for those operators:

- Needing a low BN oil when operating on fuels of below 1.5% sulphur,
- And who, at their own discretion, wish to remain on the same lubricant grade for fuels sulphur of up to ~3%, but corrosion sensitive engines should select higher BN oil, especially for prolong operation at sulphur levels above ~3.5%.

#### Main Performance Features

- Excellent control of piston ring and cylinder liner wear
- Low BN, low ash. Ensures reduced deposits, especially calcium carbonate; hence fairly tolerant of engines on high cylinder oil feed-rate
- High level of engine cleanliness
- Minimises risk of scuffing during prolonged operation on low-sulphur fuel.
- Excellent thermal/oxidative stability; based on technology for high temperature performance

#### Approvals

**Energol CL 505** has been produced to meet the requirements of major engine builders. As environmental friendly drive continues, the subject of low sulphur fuel and expert views are undergoing continuous evolution. It is therefore essential that the recommendations made by the relevant engine builder are fully complied with when selecting the grade of cylinder lubricant to be used.

#### Care and Handling

It is recommended that the mixing of different suppliers' cylinder oils should be avoided. In situations where this may not be possible it is recommended that you contact your local BP Marine representative for further advice.

## Packaging and Storage

Supplied in bulk and drums of approximately 210 litres.

Where outdoor storage is unavoidable, drums should be covered.

The drums should be stored in such a way as to ensure they are not damaged and grade markings are not obliterated. They should be positioned horizontally so as to prevent water collecting on drum ends.

Ensure drums are tightly re-sealed after use.

## Typical Characteristics

		Test Method	Unit	CL 505
<b>SAE Number</b>				50
<b>Kinematic Viscosity</b>	100°C	ASTM D445	mm <sup>2</sup> s <sup>-1</sup>	19.5
<b>Base Number (BN)</b>		ASTM D2896	mgKOH/g	50
<b>Density</b>	15°C	ASTM D1298	kg/m <sup>3</sup>	930
<b>Flash Point (PMC)</b>		ASTM D93	°C	>190
<b>Pour Point</b>		ASTM D97	°C	-9

The above figures are typical of those obtained with normal production tolerances, and do not constitute a specification. Note 1 mm<sup>2</sup> s<sup>-1</sup> = 1 cSt.

## Health, Safety and Environment

Health, safety and environmental information is provided for this product 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 plc 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.

## General Advice

Further information on all BP Marine lubricants is available from any BP office or from:

BP Marine Ltd  
Building D  
Chertsey Road  
Sunbury-on-Thames  
Middlesex  
TW16 7LN  
England, United Kingdom

[www.bpmarine.com](http://www.bpmarine.com)

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