

## Perfecto HT 5

Heat transfer oil

### Description

Castrol Perfecto™ HT 5 is based on a solvent-refined, high viscosity index mineral oil specially selected for its high thermal and oxidation stability.

### Application

Perfecto HT 5 is primarily intended for use in closed heat transfer systems with bulk temperatures up to 300°C. It can also be used in open systems at much lower bulk oil temperatures.

Perfecto HT 5, because of its solvency and high thermal stability serves as excellent Turbine Flushing oil.

### Advantages

- Tightly controlled specification helps minimize deposits in heat exchangers in order to maintain heat transfer efficiency.
- High operating temperature capability in closed systems with temperatures up to 300°C permitted.

### Additional information

#### Open Systems

The maximum operating temperature of an open system should not exceed 100°C except for very short periods. Open systems operating above 100°C would be subject to a special recommendation from Castrol's Technical Service department.

#### System Conditioner – Castrol Cyltech 70

**Cyltech 70** is classified as a heat transfer system conditioner which facilitates the removal of sludge and varnish deposits by providing a cleaning action. It is suitable for use in contaminated systems operating at temperatures below 315°C.

Typical treat rates vary between 1 to 5% depending on the condition of the system. This charge may be required to circulate a couple weeks to ensure total conditioning has occurred.

Consult Castrol's Technical department for specific advice.

## Typical Characteristics

Test	Method	Units	Perfecto HT 5
Density at 15°C	ASTM D4052	g/ml	0.868
Kinematic Viscosity at 40°C	ASTM D445	mm <sup>2</sup> /s	30.5
Kinematic Viscosity at 100°C	ASTM D445	mm <sup>2</sup> /s	5.28
Viscosity Index	ASTM D2270	-	106
Pour Point	ASTM D97	°C	-9
Flash Point, PMC	ASTM D93	°C	210
Flash Point, COC	ASTM D92	°C	220
Fire Point	ASTM D92	°C	249
Colour	IP 196	-	2.0
Neutralisation Value	IP 1A	mgKOH/g	<0.05
Specific Heat at 15°C	-	kJ/kg°C	1.86
Maximum Film Temperature	-	°C	>340
Thermal Conductivity at 15°C	ASTM D1160	W/m°C	0.133
Distillation Range		°C	
Initial Boiling Point	-		343
10% Distilled at			390
90% Distilled at			454
Thermal Expansion Co-efficient per °C at 15°C	-		0.00077

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

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