



## Perfecto™ HT 5 D

Thermic Fluid

### Description

Castrol Perfecto™ HT 5 D (previously called Supertherm™ 550) is a premium; high performance fluid designed for excellent performance in Thermic Fluid Heating Systems. Perfecto HT 5 D is blended from highly refined base stocks and carefully selected additive package to make it suitable as a long life thermic fluid for a wide range of temperature applications in Thermic Fluid heaters.

### Application

Perfecto HT 5D is primarily intended for use in closed heat transfer systems with bulk temperatures up to 320°C. and a maximum film temperature of 340°C. It can also be used in open systems at much lower bulk oil temperatures.

Before being commissioned the system should be assessed to determine if treatment with a system conditioner such as Castrol Cyltech 70 is needed help dislodge and clean any deposits before draining the oil. Once the oil is drained from the system the system requires a flush with Perfecto HT 5D. This flush serves to remove any remaining deposits and clean out the system conditioner completely from the system. Once this flush oil is drained and discarded then the system is ready for charging with fresh Perfecto HT 5D ready for operation. For further information on change out of heat transfer systems please contact the Castrol Technical Helpline.

Despite the excellent oxidative stability of Caastrol Perfecto HT 5D, precautions must be made to minimise exposure of hot oil to the air. This exposure often occurs in the expansion tank. Ensure the temperature of the oil in the expansion tank does not exceed 60°C.

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

### Advantages

- Tightly controlled specification helps minimise deposits in heat exchangers in order to maintain heat transfer efficiency
- High operating temperature capability in closed systems with temperatures up to 320oC permitted
- Ease of circulation even when a system is started from cold
- Contains all essential characteristics to ensure a long and trouble free service.

## Typical Characteristics

Name	Method	Units	Perfecto HT 5 D
Appearance	Visual	-	Bright Clear Amber Fluid
Kinematic Viscosity @ 40°C / 104°F	ASTM D445 / ISO 3104	mm <sup>2</sup> /s	30.5
Kinematic Viscosity @ 100°C / 212°F	ASTM D445 / ISO 3104	mm <sup>2</sup> /s	5.28
Viscosity Index	ASTM D2270 / ISO 2909	-	>100
Copper Corrosion	-	Rating	1b
Specific Heat @ 24 °C	-	KJ/Kg °C	1.894
Thermal Conductivity @24 °C	-	W/M°C	0.1324
CCR %	-	w/w	0.1
Pour Point °C	ASTM D97/ ISO 3016	°C	-12
Flash Point - Closed Cup Method	ASTM D93 / ISO 2719	°C	210
Flash Point - Open Cup Method	ASTM D92 / ISO 2592	°C	220
Neutralization Value	ASTM D974 / ISO 6618	mgKOH/g	<0.05
Distillation range, Initial Boiling point	-	°C	343
Distillation range, 10% Distilled at	-	°C	390
Distillation range, 90% Distilled at	-	°C	454
Bulk Temperatures upto	-	°C	320
Maximum Film Temperature	-	°C	340

Subject to usual manufacturing tolerances.

**This product was previously called Supertherm 550. The name was changed in 2015.**

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