



Product Data

PERFECTO HT 5

Issue Number 1
18/01/2007

Heat Transfer Fluid

DESCRIPTION

Castrol Perfecto HT5 is a heat transfer oil based upon highly refined mineral oil, selected for its high thermal stability, resistance to oxidation and low volatility.

APPLICATION

Castrol Perfecto HT5 is primarily intended for use in enclosed and sealed systems where oxidation of the oil cannot take place as contact with air has been prevented. In such systems maximum bulk temperatures of 300°C (film temperatures up to 320°C) are permissible.

Systems are normally designed so that the only contact between the oil and air is in a header tank where the oil is relatively cool and the area of the exposed oil surface is limited. Although the inherent oxidation stability of this oil is high, it should be realised that the working life of the oil depends to a considerable extent on the effectiveness of the measures taken to exclude air. In open baths the oil will oxidise rapidly at temperatures much in excess of 100°C.

Castrol Perfecto HT5 is a low viscosity oil for high velocity circulating systems - high flow rates allow high heat transfer rates.

FEATURES

◆ Inherent oxidation resistance

BENEFITS

◆ Improved oil life



Product Data

PERFECTO HT 5

TYPICAL PHYSICAL CHARACTERISTICS

Relative Density	@15°C	0.875
	@ 100°C	0.819
	@ 200°C	0.758
	@ 300°C	0.699
Thermal Conductivity @ 15°C, W/m°C		0.133
Viscosity Index (ASTM D2270)		108
Specific Heat Capacity @ 15°C, kJ/kg°C		1.86
Kinematic Viscosity, cSt	@ 25°C	63.8
(ASTM D445)	@ 40°C	30.5
	@ 50°C	21.0
	@ 100°C	5.38
	@ 150°C	2.40
	@ 200°C	1.39
	@ 250°C	0.90
	@ 300°C	0.67
Colour, ASTM D1500		2.0
Pour Point, °C		-9
Closed Flash Point, °C		207
Open Flash Point, °C		222
Fire Point, °C		249
Spontaneous Ignition Temperature, °C		420
Distillation Range ASTM D116	Initial Boiling Point, °C	367
	10% Distilled @ °C	403
	90% Distilled @ °C	462
Neutralisation Value, mgKOH/g		<0.05

APPROVALS: Rolls Royce CSS 168

Health and Safety information sheets are available for all Castrol products from the address below:
Castrol (U.K.) Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, England, Telephone:
Orders/Enquiries (08459)645111, Technical Enquiries (01793)452111, Fax (01793)486083

All reasonable care has been taken to ensure that the information contained in this publication is accurate as at the date of printing. It should be noted however that the information above may be affected by changes occurring subsequent to the date of printing in the blend formulation or methods of application of any of the products referred to or in the requirements of any specification approval relating to any such products.