



AGT-HTS

High Performance Synthetic Aero-derivative Turbine Oil

Description

Castrol AGT-HTS is a lubricating oil with a viscosity of 5 cSt at 100°C. It is based on neopentyl polyol esters with high thermal stability, fortified with carefully selected anti-oxidant, anti-wear and anti-corrosion additives.

Application

Castrol AGT-HTS has been designed for use in aero derivative gas turbine engines in ground gas turbines (aero-derivative) including marine and off-shore installations. It is tailor-made to ensure low coking propensity, high resistance to oxidation and thermal degradation, high electrical conductivity. Therefore Castrol AGT-HTS is recommended for use in hot running engine designs where evidence of oil coking and/or oil degradation was noted.

Approval Status

Aero-derivative gas turbines requiring a MIL-PRF-23699 G Class HTS lubricant

- Recommended for Rolls-Royce/Siemens 501K-B7, 501K-B7S and 501K-B7C.
- Meets requirements of SAE AS 5780HPC

Advantages

- High performance anti oxidant
- Minimises seal swell within the HTS class of lubricants
- Excellent cold start performance

Additional Information

Fully miscible in all proportions with other MIL-PRF-23699 lubricants. When switching from one oil brand to another brand within the same specification (MIL-PRF_23699), the "top-off" procedure is preferred. Experience has shown a gradual transition is preferred to avoid carbon shedding for elastomer seals in the lubrication circuit. For more details on compatibility please contact your Castrol representative.

Typical Characteristics

Name	Method	Units	AGT-HTS
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	4.98
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	24.6
Kinematic Viscosity @ -40°C / -40°F	ISO 3104 / ASTM D445	mm ² /s	9000
Density @ 20°C / 68°F	ISO 12185 / ASTM D4052	kg/m ³	994
Viscosity stability, 72h at -40°C / -40°F, % change	FED-STD-791-3458	%	0.6
Evaporation loss, 6h30mins at 204°C/ 399°F	ASTM D972	%w t	3.1
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	264/507
Pour Point	ISO 3016 / ASTM D97	°C/°F	-60/-76
Acid Number	SAE-ARP-5088	mg KOH/g	0.22
Shear Stability, viscosity loss	ASTM D2603	%	-0.1
AMS 3217/4 Rubber Sw ell, 72 hrs at 204°C	FED-STD-791-3604	%	18.2
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml / ml	5 / 0
Foam Sequence II - tendency / stability	ISO 6247 / ASTM D892	ml / ml	5 / 0
Foam Sequence III - tendency / stability	ISO 6247 / ASTM D892	ml / ml	5 / 0
Thermal stability and corrosivity, 96h at 274°C			
Viscosity change at 40°C	FED-STD-791-3411	%	0.04
Acid number change	FED-STD-791- 3411	mg KOH/g	0.4
Steel w eight change	FED-STD-791- 3411	mg/cm ²	0.02
HLPS Dynamic coking at 375°C			
Deposit after 20 h	SAE-ARP-5996	mg	0.15
Deposit after 40 h	SAE-ARP-5996	mg	0.24
Electrical conductivity, at 20°C	ASTM D 2624	pS/m	1500

Subject to usual manufacturing tolerances.

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