



## 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 <sup>2</sup> /s	4.98
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	24.6
Kinematic Viscosity @ -40°C / -40°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	9000
Density @ 20°C / 68°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	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	%wt	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 Swell, 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 weight change	FED-STD-791- 3411	mg/cm <sup>2</sup>	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.

AGT-HTS

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