



AEROSHELL ASCENDER

AeroShell Ascender is a high performance, low coking, 5 mm²/s synthetic hindered ester base stock combined with a state of the art additive system to both improve thermal and oxidation stability and provide superior elastomer compatibility.

APPLICATIONS

AeroShell Ascender was developed for the latest generation of gas turbine engines as a low-coking, high compatibility product. Its improved thermal and oxidative stability will ensure negligible coke formation in the engines, so any traditional engine problems associated with coke should never occur. It has also been tested extensively for elastomer compatibility, which is a known service problem.

AeroShell Ascender therefore offers the customer the balance of low coking performance with excellent elastomer compatibility.

AeroShell Ascender will also deliver performance benefits in today's existing high powered, high compression engines in which the older generation of oils can be stressed up to and beyond their thermal limits, as evidenced by oil coking in the high temperature bearing areas.

SPECIFICATIONS

U.S.	Approved MIL-PRF-23699 HTS Grade
SAE	Approved AS 5780A HPC Grade

APPROVALS

Fully approved in IAE V2500 Series engines

For the latest approval status in other engines and accessories please contact your local Shell Aviation focal point

PROPERTIES

Properties	Typical	AS 5780A Limits
Appearance	Clear & Bright	
Density @15°C	990.8	
Foaming	Passes	Must pass
Flash point	266°C	246°C min
Vk@100°C	5.023	4.9 to 5.4
Vk@40°C	25.47	23.0 min
Vk@ -40°C	11724	13000 max
Solid particles (sediment)	6mg/l	10 max
-ash	0.3mg/l	1 max
Water content	483ppm	
Pour point	< -54°C	-54°C max
Total Acidity	0.3 mgKOH/g	1.0 max
Oxidation/corrosion @ 204°C	Passes	Must pass
Thermal Stability/Corrosivity @ 274°C	Passes	Must pass

FEATURES & BENEFITS

The value of AeroShell Ascender lies in its ability to deliver both low coking *and* elastomer compatibility – or seal integrity. Until recently, it has been commonly accepted that the two are mutually incompatible so that improving the oil's properties in one regard means compromising the other.

For airline operators, this problem can be expensive in terms of prematurely degraded seals. With AeroShell Ascender, Shell Aviation have a product that now deals with this problem so operators no longer have to choose between performance and compatibility.

Feature	Benefit
Excellent elastomer seal compatibility	Reduced chance of seal swell or degradation leading to high oil consumption and cost of changing the seals
Low coking performance	Less chance of oil coke build up in bearing chambers and oil service pipes resulting in lower maintenance and cleaning costs
Improved oxidation and thermal stability	Extended oil life during arduous engine conditions
Excellent compatibility with other approved oils	No issues or concerns when changing from one approved oil to AeroShell Ascender
A 'high performance capability' grade oil	Improved performance over traditional 'standard' grade oils can help reduce maintenance costs and extend engine life