

## ExxonMobil Mobil Aero HFA

Category : Fluid , Lubricant

### Material Notes:

Mobil Aero HFA, HF, and HFS are formulated for aircraft systems where use of hydrocarbon-based hydraulic fluids is required. They are low viscosity products, high VI (viscosity index) fluid with excellent low temperature properties, good anti-wear performance, and good chemical stability. Mobil Aero HFA and HF are composed of mineral base oil stock and contain shear-stable VI improvers; Mobil Aero HFS is a synthetic polyalphaolefin-based fluid. Mobil Aero HFA is a premium quality fluid that meets the requirements of the U.S. Military specification MIL-H-5606A (now obsolete). It has a very high VI and is suitable for use at temperatures down to -54 °C (-65 °F). While this quality fluid is no longer used by the U.S. Military, it is still used in some older, small private, and commercial aircraft. It is also used in industrial and commercial equipment requiring good fluidity at very low temperatures, where Mobil Aero HFA provides long, trouble-free service over a wide range of operating conditions. Mobil Aero HF is a premium quality fluid that is approved against the most current version of U.S. Military specification MIL-PRF-5606. It has physical properties very similar to Mobil Aero HFA, and also meets "super-clean" requirements required by modern aircraft hydraulic systems. It is intended primarily for military aircraft, but it is also used as a hydraulic fluid for small private and commercial aircraft, and as a strut fluid in landing gear of large commercial aircraft. It is a NATO Code Number H-515 fluid. Mobil Aero HFS is a synthetic polyalphaolefin lubricant that is approved against the most current version of U.S. Military specification MIL-PRF-83282. It does not contain a viscosity index (VI) improver. It is designed for use at temperatures down to -40°C (-40°F). It provides lower flammability and volatility and improved stability, but has a higher viscosity at low temperature than Mobil Aero HF. It meets the "super-clean" requirements. It is intended primarily for U.S. military aircraft. It is a NATO Code Number H-537 fluid.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-Mobil-Aero-HFA.php](http://www.lookpolymers.com/polymer_ExxonMobil-Mobil-Aero-HFA.php)

Physical Properties	Metric	English	Comments
Specific Gravity	0.882 g/cc	0.882 g/cc	ASTM D4052
API Gravity	29 °	29 °	
Viscosity Measurement	370	370	Index; ASTM D2270
Viscosity Measure	10.4 cSt	10.4 cSt	ASTM D445
	@Temperature 54.4 °C	@Temperature 130 °F	
	450 cSt	450 cSt	Kinematic Viscosity; ASTM D445
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	1950 cSt	1950 cSt	Kinematic Viscosity; ASTM D445
	@Temperature -54.0 °C	@Temperature -65.2 °F	
Kinematic Viscosity at 40°C (104°F)	13.9 cSt	13.9 cSt	ASTM D445
Kinematic Viscosity at 100°C (212°F)	5.1 cSt	5.1 cSt	ASTM D445
Evaporation Loss	11 %	11 %	6.5 hr @ 205°C

Mechanical Properties	Metric	English	Comments
Bulk Modulus	1.379 GPa	200.0 ksi	Isothermal secant at 40°C, 4000 psig
Four Ball Wear	0.800 mm	0.0315 in	40 kg, 75°C, 1200 rpm; ASTM D4172

Thermal Properties	Metric	English	Comments
Pour Point	-66.0 °C	-86.8 °F	ASTM D97
Flash Point	108 °C	226 °F	ASTM D92

Component Elements Properties	Metric	English	Comments
H2O	0.0040 %	0.0040 %	

Chemical Properties	Metric	English	Comments
Total Acid Number	0.040	0.040	

Descriptive Properties	Value	Comments
Color	red	
Copper Strip Corrosion, ASTM D130	2E	72 hrs @ 135°C
Foam Sequence I, ASTM D1138	30/0	
Low Temperature Stability	pass	72 hrs @ -54°C
Oxidation Corrosion Stability	pass	168 hrs @ 135°C
Rubber Swell, %	19 to 30	Nitrile Rubber, 168 hr @ 70°C
Sonic Shear Stability, KV change %	15 (max)	@ 40°C

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China