



PRODUCT DATA SHEET

Havens Aviation 4

DESCRIPTION

Havens Aviation 4 is a mineral hydraulic oil with very good low temperature characteristics and capable of operating over a wide temperature range. Havens AeroFluid 4 is composed of a mineral oil base stock and a complex additive package which results in a product with excellent low temperature flow and anti-wear properties, exceptional antifoam characteristics, and excellent oxidation stability.

The useful operating temperature range unpressurised is -54°C to 90°C .

The useful operating temperature range pressurised is -54°C to 135°C .

APPLICATIONS

Havens AeroFluid 4 is intended for use as a hydraulic fluid in undercarriage retraction mechanisms, flap jacks and control mechanisms, brakes, shock absorbers, automatic pilots, oleo legs, tail wheels, servo units, etc. It is also suitable for lubricating de-icing pumps and gearboxes.

SPECIFICATIONS

Meets the requirements of: MIL-H-5606A; DTD.585; DEF STAN 91-48 Grade Normal; DCSEA 415/A; AMG-10; NATO Code H-520; OM-18

TYPICAL PROPERTIES

PROPERTIES	TYPICAL
Oil type	Mineral
Kinematic viscosity mm^2/s	
@ 100°C	5.30
@ 40°C	14.1
@ -40°C	491
@ -54°C	2300
Flashpoint Pensky Martin Closed Cup $^{\circ}\text{C}$	105
Pourpoint $^{\circ}\text{C}$	< - 60
Total acid number mgKOH/g	0.01
Relative density @ $15.6/15.6^{\circ}\text{C}$	0.87
Evaporation @ 100°C %m	10
Colour	Red
Copper corrosion	Passes
Low temperature stability	Passes
Shear stability	Passes
Foaming characteristics	Passes
Phosphorus content % m/m	Passes
Oxidation & corrosion stability (168 hrs @ 135°C)	
-metal weight change	Passes
-change in viscosity @ 40°C %	+2.0
-change in acid number mgKOH/g	+0.1
Anti-wear properties, scar diam mm	0.95
Rubber swell 168 hrs @ 70°C Vol change %	25

The values shown above are typical values at the date of publication. Havens Lubricants reserves the right to change these typical values without prior notice.