AEROSHELL FLUID 61

AeroShell Fluid 61 is a synthetic hydrocarbon base hydraulic fluid specifically inhibited to provide excellent oxidation stability for the oil and good corrosion preventive protection to the hydraulic system.

APPLICATIONS

AeroShell Fluid 61 is designed for use where a fire resistant preservative grade hydraulic fluid is required and is suitable for operational use as well as preservation of components during storage and shipment.

AeroShell Fluid 61 has an operating temperature range of –40°C to +204°C.

AeroShell Fluid 61 is compatible with AeroShell Fluids 4, 31, 41, 51 and 71.

AeroShell Fluid 61 is a synthetic oil and should not be used in contact with incompatible seal materials. Refer to the General Notes at the front of this section for further information.

Chlorinated solvents should not be used for cleaning hydraulic components which use AeroShell Fluid 61. The residual solvent contaminates the hydraulic fluid and may lead to corrosion.

SPECIFICATIONS

U.S.	Approved MIL-PRF-46170C Type I*
British	–
French	–
Russian	–
NATO Code	H-544
Joint Service Designation	–

*The US specification covers two grades, Type I and Type II. The only difference between the two grades is that Type II is dyed red for aerospace use whereas Type I is undyed.

PROPERTIES	**MIL-PRF-46170C Type I**	**TYPICAL**
Oil Type	–	Synthetic Hydro-carbon
Kinematic viscosity mm^2/s @ 100°C @ 40°C @ –40°C @ –54°C	 3.4 min 19.5 max 2600 max Report	 3.71 15.43 2488 15022
Flashpoint Cleveland Open cup °C	218 min	233
Fire Point Cleveland Open Cup °C	246 min	248
Acid or Base number mgKOH/g	0.2 max	0.07
Evaporation loss 22 hrs @149°C % m	5.0 max	2.39
Relative density @ 15.6/15.6°C	–	0.859
Pourpoint °C	–54 max	Below –54
Water Content ppm	500 max	278
Auto-ignition temperature °C	343 min	354
Colour	Undyed	Undyed
Particle Count, Automatic, per Lt 5 to 25 µm 26 to 50 µm 51 to 100 µm Over100 µm	 10000 max 250 max 50 max 10 max	 1414 39 4 0

Table continued

Table continued

PROPERTIES	MIL-PRF-46170C Type I	TYPICAL
Trace sediment mg/l	0.005 max	0.001
Rubber swell, 168 hrs @ 70°C % swell	15 to 25	21.5
4-Ball Wear, 75°C scar dia, mm 10 kg load/1200 rpm 40 kg load/1200 rpm	 0.3 max 0.65 max	 0.23 0.38
Galvanic corrosion	Must pass	Passes
Oxidation & corrosion stability 168 hrs @ 121°C – metal weight change – viscosity change @ 40°C % – change in acidity mgKOH/g	 Must pass 10 max 0.3 max	 Passes Less than 10 Less than 0.3
Low temperature stability	Must pass	Passes
Rust prevention	Must pass	Passes
Flammability	Must pass	Passes

A viscosity/temperature curve is shown at the end of this section.