AEROSHELL FLUID 3

AeroShell Fluid 3 is a general purpose mineral lubricating oil recommended for general lubrication of aircraft parts that require a light oil with good low temperature characteristics and a low freezing point. It is inhibited against oxidation and corrosion. AeroShell Fluid 3 is a relatively low viscosity product with good resistance to evaporation.

APPLICATIONS

AeroShell Fluid 3 is recommended for general lubrication of aircraft parts that require a light oil, e.g. hinges, pivot joints, shaft joints, linkage pins and bearings, pulleys, cables, camera mechanisms, radio and radar gear and instruments. AeroShell Fluid 3 is normally applied by means of an oil can or brush. For this reason it is also described as 'an oilcan lubricant'.

Operating temperature range of AeroShell Fluid 3 is -54°C to +121°C.

For high temperature applications where no provision is made for frequent re-lubrication the synthetic oil, AeroShell Fluid 12, should be used in place of the mineral oil, AeroShell Fluid 3; however in this case care should be taken to ensure that there is no incompatibility between AeroShell Fluid 12 and seals, paints etc.

SPECIFICATIONS

U.S.	Approved MIL-PRF-7870C
British	Approved DEF STAN 91-47
French	–
Russian	–
NATO Code	O-142
Joint Service Designation	OM-12

PROPERTIES	**MIL-PRF-7870C**	**TYPICAL**
Oil type	–	Mineral
Kinematic viscosity mm^2/s @ 38°C @ –40°C	 10 min 4000 max	 10.0 Less than 4000
Flashpoint Cleveland Open Cup °C	 130 min	 155
Pourpoint °C	–57 max	Below –57
Evaporation @ 99°C, 22hrs %m	25 max	13
Total acid number mgKOH/g	–	0.3
Relative Density @ 15.6/15.6°C	–	0.89
Low temperature stability 72 hrs @ –54°C	 Must pass	 Passes
Oxidation & corrosion stability 168 hrs @ 121°C		
– metal weight change – viscosity change % – acid number change mgKOH/g	Must pass –5 to +20 0.2 max	Passes 10 0.02
Corrosivity	Must pass	Passes
ASTM colour	–	< 0.5

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