



AEROSHELL FLUID 41

'SUPERCLEAN' HYDRAULIC FLUID

DESCRIPTION

AeroShell Fluid 41 is a 'superclean' aviation quality mineral hydraulic oil also used in specialist non-aviation applications. To ensure that the fluid meets the 'superclean' specification, very strict blending, packaging and quality control procedures are adopted. AeroShell Fluid 41 contains additives which provide excellent low temperature fluidity as well as exceptional anti-wear, oxidation - corrosion inhibition and shear stability. In addition metal de-activators and foam inhibitors are included in this high viscosity index fluid to enhance performance in hydraulic applications.

AeroShell Fluid 41 can be used in aircraft systems operating unpressurised between -54°C to 90°C, or pressurised between -54°C to 135°C.

AeroShell Fluid 41 should **not** be used in systems incorporating synthetic rubber components and **must not** be used in systems with natural rubber. Red dye is added to the product for ease of identification and to assist in the detection of leaks.

PERFORMANCE FEATURES

- Many applications now require the use of a mineral oil hydraulic fluid with improved low temperature performance. AeroShell Fluid 41 is particularly recommended for these applications, especially where the cleanness of the fluid can increase the performance and reliability of all components in the hydraulic system.
- AeroShell Fluid 41 has been formulated to provide exceptionally good anti wear performance under both high and low load conditions. These lubrication properties are further enhanced by the low frictional characteristics to prevent the occurrence of stick-slip ensuring smooth precise control from the hydraulic system.
- The life expectancy of a hydraulic oil at elevated temperatures is determined by its ability to resist oxidation in the presence of air, moisture and metals. This oxidation process produces sludge and acidic products which AeroShell Fluid 41 has shown to resist better than other hydraulic oils.
- AeroShell Fluid 41 is also recommended for non-aviation applications such as cranes, forklift trucks, armoured military vehicles and circuit breakers in power stations. It is also used extensively in cool storage facilities.

SUMMARY OF BENEFITS

- **Enhanced reliability** of all components in hydraulic systems due to the 'superclean' specification.
- **High Viscosity Index Base Oils** used in AeroShell Fluids maintain their viscosity and protect components more effectively under the high shear stresses that a hydraulic system places on lubricants.



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- **Qualified** to MIL-H-5606G fluid ¹ which provides compatibility with other similarly qualified oils.
- **Improved Equipment Life** and decreased down time due to the superior wear prevention and corrosion protection.
- **Long Fluid Life** due to enhanced chemical and thermal stability.

HEALTH & SAFETY

AeroShell Fluid 41 is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety refer to the appropriate Shell Material Safety Data Sheet.

SPECIFICATIONS/APPROVALS

US	MIL-H-5606 G; Superclean
British	DEF STAN 91-48; Superclean
French	AIR 3520/B; [Grade H-515]
NATO	H-515 [H-520]
Joint Service Designation	OM-15 [OM-18]

[] Indicates that the product is equivalent to specification

TYPICAL CHARACTERISTICS

DESCRIPTION	UNITS	METHODS	TYPICAL
APPEARANCE	VISUAL	-	Red, Clear & Bright
DENSITY @ 15°C	kg/L	-	0.87
VISCOSITY AT 100°C	mm ² /s	-	5.30
VISCOSITY AT 40°C	mm ² /s	-	14.1
POUR POINT	°C	-	< -60
FLASH POINT (PMCC)	°C	-	105
AUTO IGNITION TEMP.	°C	-	230
TOTAL ACID No	mg KOH/g	-	0.01

ADVICE

Advice on applications not covered in this leaflet may be obtained from your Shell Representative. Shell Technical Advice Centre: Free Call 1800 805 000.

¹ A qualified product must be blended and packed in the plant listed on the QPL to ensure that the base oil is made in an approved refinery and that the product is blended and packed in an approved and closely monitored facility.



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