Technical Data Sheet

AeroShell **Fluid *2XN***

Corrosion inhibited mineral oil for aircraft engine preservation

AeroShell Fluid 2XN is a corrosion preventative concentrate from which AeroShell Fluid 2F was blended; the blending proportions are one part AeroShell Fluid 2XN to three parts AeroShell Oil 100. In general, operators should obtain supplies blended ready for use in engines, unless the use of the concentrate is specified.

DESIGNED TO MEET CHALLENGES

Main Applications

AeroShell Fluid 2XN is primarily used as an ingredient of AeroShell Fluid 2F, but can be used undiluted to provide additional protection for piston engines after run-out on AeroShell Fluid 2F, by spraying exhaust ports, rocker arms, accessories.

For aircraft gas turbine engines a mixture of one part of AeroShell Fluid 2XN to three parts of AeroShell Turbine Oil 2 is required. Detailed instructions for inhibiting turbines are given in specification MIL-E-5607F.

The ashless anti-corrosion additive package together with the highly refined mineral base oil protects the engine by minimising the effects of humidity and neutralising the acidic components of engine oil oxidation and, in piston engines, the combustion byproducts as well.

Specifications, Approvals & Recommendations

- MIL-C-6529C Type I
- DTD900/4913A (Obsolete) (British)
- AIR 1503/B Type B Concentrate (French) equivalent
- NATO Code C-608
- Joint Service Designation ZX-21

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	MIL-C-6529 C Type I	Typical
Oil Type					Mineral
Kinematic viscosity	@37.8°C	mm^2/s	ASTM D445	Report	285
Kinematic viscosity	@98.9°C	mm^2/s	ASTM D445	Report	22
Density	@15°C	kg/m^3	ASTM D4052	-	900
Volatility		%	FED-STD-791 M.3480	3 max	<0.52
Viscosity (after elimination of volatile content)		mm^2/s	FED-STD-791 M.304/305 and 9101	90 – 110	105
Viscosity Index			FED-STD-791 M.9111	95 min	100
Flash Point (COC)		°C	FED-STD-791 M.1103	204 min	276
Pour point		°C	FED-STD-791 M.201	-12.2 max	-17
Carbon residue		%m	FED-STD-791 M.5001	2.0 max	0.5
Lead Corrosion	@149°C		FED-STD-791M.5321	70 max	30
Ash		%	FED-STD-791 M.5421	0.015 max	0.01
Copper corrosion	@100°C		FED-STD-791 M.5325	2A max	Passes

Properties	Method	MIL-C-6529 C Type I	Typical
Rust protection (humidity cabinet)		Must pass	Passes MIL-C-6529
High/ Low Temperature Stability		Must pass	Passes MIL-C-6529
HBr Neutralisation		Must pass	Passes MIL-C-6529

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

  This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

  Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

  Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from https://www.epc.shell.com

- **Protect the Environment**

  Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**

  Advice on applications not covered here may be obtained from your Shell representative.