



# AeroShell Fluid 5M-A

## Mineral lubricating oil for helicopter transmissions

AeroShell Fluid 5M-A is a highly refined, medium viscosity mineral oil containing an extreme pressure additive as well as additives to provide good oxidation and corrosion protection.

### DESIGNED TO MEET CHALLENGES

#### Main Applications

AeroShell Fluid 5M-A is used for the lubrication of gears where high tooth loadings exist. AeroShell Fluid 5M-A is particularly recommended for the lubrication of translation units of contra-rotating propellers, radar gearboxes, constant speed alternator drives. AeroShell Fluid 5M-A is also used in those helicopter transmissions (gearboxes) which require use of a MIL-PRF-6086 oil.

AeroShell Fluid 5M-A is also suitable as an extreme pressure lubricant for heavily loaded pins, bushes and gear mechanisms.

AeroShell Fluid 5M-A must not be used in engines.

#### Specifications, Approvals & Recommendations

- MIL-PRF-6086F 'Grade Medium'
- DEF STAN 91-112 Grade M
- NATO NATO Code O-155
- Joint Service Designation OEP-70

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

#### Typical Physical Characteristics

Properties	Method	MIL-PRF-6086F Medium Grade	Typical
Oil Type		-	Mineral
Colour (ASTM)	ASTM D1500	8 max	1.5
Relative Density @15.6/15.6°C		-	0.92
Kinematic Viscosity @37.8°C mm <sup>2</sup> /s	ASTM D445	60 - 82	72
Kinematic Viscosity @98.9°C mm <sup>2</sup> /s	ASTM D445	-	8.7
Viscosity Index	ASTM D2270	80 min	102
Pour Point °C	ASTM D97	-28.9 max	-39
Flash Point °C	ASTM D92	154.5 min	181
Total Acid Number mgKOH/g	ASTM D974	1.0 max	< 0.1
Copper corrosion 3 hrs @100°C	ASTM D130	Must pass	Passes
Load Wear Index kgf	ASTM D2783	40 min	47
Precipitation number ml	ASTM D91	0.1 max	< 0.05
Foaming Tendency	ASTM D892	Must pass	Passes

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

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.