



# 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
Kinematic Viscosity	@98.9°C mm <sup>2</sup> /s	ASTM D445	-
Viscosity Index	ASTM D2270	80 min	102
Pour Point	°C	ASTM D97	-28.9 max
Flash Point	°C	ASTM D92	154.5 min
Total Acid Number	mgKOH/g	ASTM D974	1.0 max
Copper corrosion 3 hrs	@100°C	ASTM D130	Must pass
Load Wear Index	kgf	ASTM D2783	40 min
Precipitation number	ml	ASTM D91	0.1 max
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.