

# Mobil Jet Oil II

## Aircraft Type Hydraulic Lubricant

### Product Description

Mobil Jet Oil II is a high performance aircraft-type hydraulic turbine lubricant formulated with a combination of a highly stable synthetic base fluid and a unique chemical additive package. The combination provides outstanding thermal and oxidative stability to resist deterioration and deposit formation in both the liquid and vapour phases, as well as excellent resistance to foaming. The effective operating range of Mobil Jet Oil II is between -40°C (-40°F) and 204°C (400°F). Mobil Jet Oil II is engineered for aircraft gas turbine engines used in commercial and military service requiring MIL-PRF-23699 level performance. It also is recommended for aircraft-type gas turbine engines in industrial or marine service applications

### Features & Benefits

Mobil Jet Oil II is formulated to meet the demanding requirements of aircraft-type gas turbines hydraulic over a wide range of severe operating conditions. The product has a high specific heat in order to ensure good heat transfer from oil-cooled engine parts. In extensive laboratory testing and in-flight performance, Mobil Jet Oil II exhibits excellent bulk oil stability at temperatures up to 204°C (400°F). The evaporation rate at these temperatures is low enough to prevent excessive loss of volume. Key features and benefits include:

### MAIN APPLICATIONS

- Shock strut fluid for landing gear absorber of civil and military aircrafts
- Hydraulic fluid for flight control system of military aircrafts and helicopters, missiles
- General purpose hydraulic fluid for ground equipment (tanks, armored vehicles...)

Features	Advantages and Potential Benefits
Excellent thermal and oxidation stability	Reduces the formation of carbon and sludge deposits Maintains hydraulic efficiency and extends engine life
Excellent wear and corrosion protection	Extends gear and bearing life Reduces hydraulic maintenance
Retains viscosity and film strength across wide temperature range	Provides effective lubrication at high operating temperatures
Chemically stable	Reduces evaporation losses and lowers oil consumption
Low pour point	Eases start-up in low ambient temperature conditions

## Specifications & Approvals

Mobil Jet Oil II has the following builder approvals	
<b>Engines</b>	
Honeywell/Lycoming-Turbine engines	x
Rolls-Royce/Allison Engine Company	x
CFM International	x
General Electric Company	x
IAE International	x
Pratt & Whitney Group	x
SNECMA	x
Pratt & Whitney, Canada	x
Rolls-Royce Limited	x
Honeywell/Garrett-Turbine Engine Company	x
Turbomeca	x
<b>Accessories</b>	
Honeywell-Auxiliary power units and air cycle machines	x
Hamilton Standard-Starters	x
Hamilton Sundstrand corp.- APUs, Constant-speed drives and integrated-drive generators	x
<b>Mobil Jet Oil II</b>	
Approved against U.S. Military Specification Mil-PRF-23699 (STD)	x

## Typical Properties

<b>Viscosity</b>	
cSt @ 40°C (102°F)	27.6
cSt @ 100°C (212°F)	5.1
cSt @ -40°C (40°F)	11,000
% change @ -40°C after 72 hours	-0.15
<b>Pour Point, °C (°F), ASTM D 97</b>	
	-59 (-74)
<b>Flash Point, °C (°F), ASTM D 92</b>	
	270 (518)
<b>Fire Point, °C (°F)</b>	
	285 (545)
<b>Autogenous Ignition Temp, °C (°F)</b>	
	404 (760)
<b>TAN (mg KOH/g sample)</b>	
	0.03
<b>Density @ 15°C kg/l, ASMT D 4052</b>	
	1.003
<b>Evaporation Loss, %</b>	
6.5 hr @ 204°C, 29.5" Hg	3.0
6.5 hr @ 232°C, 29.5" Hg	10.9
6.5 hr @ 232°C, 5.5" Hg (Equals pressure @ 40,000 Ft. altitude)	33.7
<b>Foam, ml</b>	
Sequence I, 24°C	8
Sequence II, 93.5°C	10
Sequence III, 75°C (after 200°F test)	8
<b>Foam Stability, after 1 min settling, ml</b>	
	0
<b>Rubber Swell</b>	
F Rubber, 72 hr @ 204°C, %	15.6
H Rubber, 72 hr @ 70°C, %	16.4
<b>Sonic Shear Stability, KV @ 40°C, change, %</b>	
	0.9
<b>Ryder Gear, Ave. lb/in % Hercules A</b>	
	2750 ,115

## Health & Safety

Based on available toxicological information, this product is not expected to produce adverse effects on health when used and handled properly. Information on use and handling, as well as health and safety information, can be found in the Material Safety Data Sheet (MSDS) which can be obtained from your local distributor or via the Internet on <http://www.exxonmobil.com/lubes>.

Exxon Mobil Corporation  
3025 Galows Road  
Fairfax, VA 22037-0001

<http://www.exxonmobil.com>

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly.

© 2001 Exxon Mobil Corporation. All rights reserved.

The ExxonMobil logotype and Mobil are trademarks of Exxon Mobil Corporation, or one of its subsidiaries.

PDBAW03