



Standard Lubricants and Fluids								
System	Type	NATO Code	UK Joint Service Designation	US Specification	UK Defence Standard	Part Number(s)	NSN(s) and Size(s)	Remarks (temp range etc)
Wheel Brakes and Shock Struts	Hydraulic fluid, petroleum base	H-515	OM-15	MIL-PRF-5606	01-005	Aeroshell 41, Royco 756	9150-00-252-6383 (1 qt)	54°C to +90°C in unpressurized systems and -54°C to +135°C in pressurized systems
Pri and Util Hyds	Hydraulic fluid, fire resistant	H-537	OX-19	MIL-PRF-83282	01-005	Aeroshell 31, Royco 782	9150-00-149-7432 (1 gal) 9150-00-281-6191 (5 gal)	-40°C to +205°C
Engine, APU and ATS	Lubricating oil, Aircraft turbine engine	O-152	OX-152	MIL-PRF-23699 (Class C/I)	01-005	Royco 899	9150-00-985-7099 (1 qt)	
NGB and MRGB	Lubricating oil, gear	N/A	N/A	N/A	N/A	ALB3, MOBIL AGL	9150-01-600-3318 (1 qt) 9150-01-600-0899 (5 gal)	
IGB and TRGB	Grease, transmission	N/A	OX-64	HMS20-1155	01-005	NS-4405-FG	9150-01-212-1409 (N/K)	-54°C to +135°C
ECS	Lubricating oil, refrigerant, compressor	N/A	OX-135	N/A	01-005	AMINKOIL EALARTIC 68, MOBIL EAL ARCTIC 68	9150-01-387-4469 (1 gal)	
Main and Tail Wheel Bearings	Grease, Aircraft, multipurpose	G-395	XG-293	MIL-PRF-81322	01-005	MOBIL Grease 28, Aeroshell 22 MOBIL Grease 28	9150-00-944-8953 (1.75 lbs) 9150-01-378-0559 (1.75 lbs)	-54°C to +175°C
Gun Recoil Damper	Damping fluid	N/A	N/A	N/A	N/A	Dowsil 510, DC 510-100CS,8LB	9150-01-0567-346 (8 lbs)	

Alternative Lubricants

System	Type	NATO Code	UK Joint Service Designation	US Specification	UK Defence Standard	Part Number	NSN(s) and Size(s)	Remarks (temp range etc)
ECU, APU and ATS	Lubricating Oil, Aircraft Turbine Engine: Synthetic 3 cSt	O-148	OX-9	MIL-PRF-7808 Grade 3	01-005	DEFSTAN01-5OX-9X1	9150-99-782-2627 (1 ltr)	ECU < -34°C only APU < -31.7°C only
ECU, APU and ATS	Lubricating Oil, Aircraft Gas Turbine Engine: Synthetic 5 cSt	O-156	OX-27	SAE AS 5780	01-005	DEFSTAN01-5OX-27X1	9150-99-225-1747 (1 ltr) 9150-99-220-1940 (5 ltr)	OX -27 should only be demanded and used when there is nil or limited stock of the standard oil. The DT must be informed when demanding and using OX-27
Pri & Util Hyds	Hydraulic fluid, petroleum bas	H-515	OM-15	MIL-PRF-5606	01-005	DEFSTAN01-5OM-15X1	9150-99-224-4971 (1 ltr) 9150-99-910-0572 (5 ltr)	-54°C to +135°C in pressurized systems

Approved Fuels								
NATO Code	NATO STANAG	UK Joint Service Designation	UK Defence Standard	US Designation	US Specification	Commercial Equivalent Designation	Commercial Equivalent Specification	Remarks (temp range etc.)
F-40	3747	AVTAG/FSII	01-005	JP-4	MIL-DTL-5624	JET B plus FSII	ASTM D6615 (with FSII)	See Notes 2 & 3 -58°C
F-44	3747	AVCAT/FSII	01-005	JP-5	MIL-DTL-5624	N/A	ASTM D1655 (with FSII)	See Notes 1, 2 & 6 . Use below -34°C is PROHIBITED
F-34	3747	AVTUR/FSII	01-005	JP-8	MIL-DTL-83133	JET A-1 plus military additive package	ASTM D1655 (with FSII)	See Notes 1, 2, 4, 6 & 7 . Use below -34°C is PROHIBITED
F-24	3747	N/A	01-005	N/A	N/A	JET A plus military additive package	ASTM D1655 (with FSII)	See Notes 1, 2, 5 & 6

Notes:

1. When using a fuel certified to ASTM D1655, the fuel may be of a synthetic blend as long as it complies with ASTM D7566.
2. When changing from one type of approved fuel to another it is not necessary to drain the fuel system before adding the different fuel type.
3. JET B is equivalent to F-40/JP-4 only when used with FSII in accordance with MIL-DTL-85470/DEF STAN 68-252 (NATO S-1745)/JSD AL41 regardless of ambient temperature.
4. JET A-1 is equivalent to F-34/JP-8 only when used with military additive package FSII MIL-DTL-85470/DEF STAN 68-252 (NATO S-1745)/JSD AL-41, Lubricity Improving Additive NATO S-1747 (as per NATO STANAG 3390) and Static Dissipater Additive (Stadis 450 or AvGuard) regardless of ambient temperature.
5. JET A is equivalent to F-24 only when used with military additive package FSII MIL-DTL-85470/DEF STAN 68-252 (NATO S-1745)/JSD AL-41, Lubricity Improving Additive NATO S-1747 (as per NATO STANAG 3390) and Static Dissipater Additive (Stadis 450 or AvGuard) regardless of ambient temperature.
6. Commercial fuels made to conform to ASTM D1655 and ASTM D7566 do not contain anti-icing additives unless specified.
7. F-34 is a mixture of F-35 (ASTM D7566) with FSII MIL-DTL-85470/DEF STAN 68-252 (NATO S-1745)/JSD AL-41. F-35 can ONLY be used with FSII MIL-DTL-85470/DEF STAN 68-252 (NATO S-1745)/JSD AL-41 regardless of ambient temperature and when delivered by a fuel bowser fitted with a tank specifically purposed to selectively inject FSII into the fuel stream pumped from the bowser into the Aircraft tanks.