

RUSSIAN AVIATION SPECIFICATIONS

SCOPE OF LIST

This list is comprised of Russian Aviation Specifications which cover aviation engine oils, hydraulic fluids, greases and allied products. The list is composed of two parts, firstly a listing of specifications and then secondly a listing of grade names.

In Russia lubricants are governed by State Standards and are designated under a series of specifications including:

- GOST: Gozudarstuyeny Standart
- VTU-(BTY): Temporary Technical Conditions
- TU-(TY): Technical Conditions
- MRTU: Inter Republic Technical Conditions

INTERPRETATION OF LIST

In this list where a grade is shown in brackets it indicates that the grade is an industrial grade. Where an asterisk* appears in the last column of the list, the AeroShell grade recommended does not necessarily meet all the clauses/requirements of the Russian Specifications, but is the nearest product marketed by Shell.

Any grade marked with brackets or an asterisk has not necessarily been tested for suitability as a replacement. Shell Companies have not been able to test samples of Russian aviation lubricants using U.S. or British test methods nor have Shell Companies been able to test AeroShell grades in full scale hardware tests prescribed by the Russian Authorities.

For this reason Shell Companies make no representation as to the fitness or suitability of any AeroShell lubricant listed in this List. Responsibility for evaluation of an AeroShell Grade as a suitable alternative is that of the customer or operator. Although the information set forth herein is presented in good faith and believed to be correct at time publication Shell Companies make no representation as to the completeness or accuracy thereof.

This information is included in this publication upon the condition that the customer/operator using this information will make their own determination as to suitability for their purpose prior to use. In no event will Shell Companies be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information. Nothing contained in this section is to be construed as a recommendation to use any product.

Specification	GOST	Grade Name	AeroShell Grade	Remarks
782-59		Grease UN	AeroShell Compound 0.5*	Technical vaseline for protection of metal surfaces against corrosion
982-68	TK TKP		AeroShell Turbine Oil 3* AeroShell Turbine Oil 3*	Transformer oil Transformer oil with anti-oxidant additive
1012-72	Avgas 95/130		Shell Avgas 100 Shell Avgas 100LL	-
1013-49 (Superseded by 2174.3-76)	MS-14 MS-20 MK-22		AeroShell Oil 80 AeroShell Oil W80 AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil 100 AeroShell Oil W100	Aircraft piston engine oils
1033-73	US-1 US-2		-	Medium melting point multi-purpose grease
1631-61 (Obsolete)	1-13		-	High temperature grease for roller bearings
1642-50	Spindle Oil AV		-	Highly refined spindle oil
1805-76	MVP		-	Instrument oil
1957-72	UT (Constantin-1)		-	Calcium based multi-purpose grease
20734-75	7-50S3		-	-
2712-75	AMS-1 AMS-3		-	Lubrication of mechanisms
2967-52	Grease AF-70		-	Instrument grease
3005-51	Gun grease		-	Corrosion protection of mechanisms
3276-74 (Obsolete)	GOI-54p		AeroShell Grease 6*	Lubricant and protective
3333-80	US4		-	Graphite grease

Specification	Grade Name	AeroShell Grade	Remarks
4003-53	Hypoid Gear oil	-	Hypoid gear oil
4216-55 (Obsolete, superseded by 18375-73)	OKB-122-3 OKB-122-4 OKB-122-5 OKB-122-14 OKB-122-16	- - - - -	A series of instrument oils
4366-76	Press Solidol S Solidol S	-	Multi-purpose, high melting point
5020-75	Steol-M	-	Synthetic hydraulic fluid
5546-66	HF-12-18	-	Refrigerator oil for Fron system in Mi-8 helicopter
5573-67 (Obsolete)	NK-50 (HK-50)	AeroShell Grease 5* AeroShell Grease 22	High temperature wheel bearing grease
6267-74	CIATIM 201	AeroShell Grease 22 AeroShell Grease 6*	Multi-purpose grease
6457-66	MK-8	AeroShell Turbine Oil 3 AeroShell Turbine Oil 3SP AeroShell Turbine Oil 2* AeroShell Turbine Oil 3SP	3 mm ² / ₄ mineral turbine
6794-78	AMG-10	AeroShell Fluid 41	Mineral hydraulic fluid
7171-78	BU	-	Gasoline and oil resistant grease
7903-74	BM-4 (VM-4)	-	-
8313-88	-	-	Fuel anti-icing additive
8551-74	CIATIM 205	-	Anti-seize grease/compound
8773-73	CIATIM 203	AeroShell Grease 22 AeroShell Grease 6*	Grease for high load mechanisms

9320-60 (Superseded by 21743-76)	MS-205	AeroShell Oil 100 AeroShell Oil W100	Aircraft piston engine oils
9433-80	CIATIM 221	AeroShell Grease 15* AeroShell Grease 22	Multi-purpose engine grease
9762-61	Grease MS-70	-	-
10227-86	TS-1	Shell TS-1	Jet fuel
10328-63	MK-6	AeroShell Turbine Oil 2*	Mineral turbine oil
10568-63	PVK Grease	-	Grease lubrication and corrosion protection
10817-64	VNII NP-44-2 VNII NP-44-2C	-	Petroleum oils for turbo-prop applications
10877-64	K-17	-	Preservative grease
10957-64	Lubricant No. 6	-	-
11110-75	CIATIM 202	AeroShell Grease 22 AeroShell Grease 6*	Instrument and roller bearing grease
11122-66	VNII NP-25	-	Bearing and pivot lubricant
11552-65	MS-6	AeroShell Turbine Oil 2*	Mineral turbine oil
12030-66	VNII NP-223	-	Lubrication of roller bearings
12031-66	VNII NP-262	-	Lubrication of bearings of electric spindles
12245-66	VNII NP-7	AeroShell Turbine Oil 750*	Synthetic turbine oil
12308	T-8V, T-6	-	Military jet fuels
13076-86	VNII NP 50-1-4F	AeroShell Turbine Oil 390* AeroShell Turbine Oil 560*	Synthetic turbine oil
14068-79	VNII NP-232	-	Anti-seize compound
15171-70	AKOR-1	AeroShell Fluid 2XN*	Preservative additive
15866-70	PFMS-4	-	Organosilicone fluid

Specification GOST	Grade Name	AeroShell Grade	Remarks
16422-70	CIATIM 208	-	Transmission grease
16564-71	RT	Shell Jet A-1	Jet aircraft fuel
16728-71	VNII NP-403	-	Hydraulic oil
18179-72	OKB-122-7	AeroShell Grease 33 AeroShell Grease 6 *	General purpose grease
18375-74 (Replaces 4216-55)	OKB-122-3 (132-19) OKB-122-5 (132-08) OKB-122-14 (132-20) OKB-122-16 (132-21) OKB-122-4 (132-07)	- - - -	Series of oils
18852-73	VNII NP-246	AeroShell Grease 15 *	High temperature grease
19537-74	PVK	AeroShell Compound 05*	Soft film protective
19774-74	VNII NP-207	AeroShell Grease 22	Multi-purpose grease
19782-74	VNII NP-225	-	Molybdenum disulphide grease
20734-75	7-50C-3	-	Silicone hydraulic fluid
21743-96	MS-14 MS-20 MS-20S MK-22 MS-20P	AeroShell Oil 80 AeroShell Oil W80 AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil W 15W-50 AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil W100	Aircraft piston engine oils
21791-76	MAS-8N MAS-14N MAS-30NK	- - -	Synthetic oils

23907-79	-	-	De-icing fluids
24300-80	LZ-31	-	Grease
24926-81	VNII NP-282	-	Grease

Specification TU	Grade Name	AeroShell Grade	Remarks
6-020-531-69	PFMS-4S	-	Specialised grease
6-02-917-79	PFMS-4S	-	Specialised grease
11-100-69	MD-BF	-	-
38-00180-75	IPM-10	AeroShell Turbine Oil 390*	Synthetic turbine oil. See also TU 38.1011299-90
38-001116-73	Grease No. 9	-	-
38-1-158-68	VNII NP-225	-	-
38-1-230-66 (Obsolete)	Grease OKB-122.7	AeroShell Grease 6*	Believed to be superseded by GOST 18179-72
	Grease OKB-122.7.5	AeroShell Grease 22	
	Grease OKB-122.8	AeroShell Grease 6*	
38-101-295-75 (Obsolete)	36/1	AeroShell Turbine Oil 390	Synthetic turbine oils (see also TU 38.101384-78)
Supersedes 38-1-164-65 and 38-1-157-65)	36/1K B3-V	AeroShell Turbine Oil 390 AeroShell Turbine Oil 500*	
38-101-295-85	B3-V	AeroShell Turbine Oil 560 AeroShell Turbine Oil 500*	Synthetic turbine oils
38-101-297-78	VNII NP 235	AeroShell Grease 15*	High temperature grease
38-101-384-78	36/1Ku-A	AeroShell Turbine Oil 390 AeroShell Turbine Oil 560* AeroShell Turbine Oil 500*	Synthetic turbine oils
38-101-419-79 (Obsolete)	CIATIM 221S	-	Grease
38-101-722-85	MN-7.5U	AeroShell Turbine Oil 750	Synthetic turbine oil
38-101-740-80	NGJ-4	Skydrol® 500B4 or LD4	Phosphate ester hydraulic fluid
38-101-741-78	-	-	Fuel static dissipater additive

38-101-950-00	ERA (VNII NP 286M)	AeroShell Grease 33 AeroShell Grease 22* AeroShell Grease 6*	Multi-purpose grease
38-101-1181-88	MS-8RK	AeroShell Turbine Oil 3SP	Mineral preservation oil for engines
38-101-1219-89	ST (NK-50)	AeroShell Grease 22	Grease
38-101-1243-89	CIATIM 221S	AeroShell Grease 22*	Grease
38-101-1299-06	IPM-10	AeroShell Turbine Oil 390*	Synthetic turbine engine oil
38-101-1332-90	TSgip	-	Heavily loaded gear oil
38-401-58-12-91	VNII NP 50-1-4U	AeroShell Turbine Oil 390 AeroShell Turbine Oil 560	Synthetic turbine engine oil
38-401-58-57-93	NGJ-5u	Sykdrol® 500B4 or LD4	Phosphate ester hydraulic fluid
38-401-121-75 (Obsolete)	VNII NP 286M	AeroShell Grease 22 AeroShell Grease 6*	Grease
38-401-286-82	VNII-NP 50-1-4U	AeroShell Turbine Oil 390 AeroShell Turbine Oil 560	Synthetic turbine engine oil
38-401-337	PTS-225	-	Synthetic turbine engine oil
301-04-010-92	LZ-240	AeroShell Turbine Oil 560	Synthetic turbine engine oil

Specification OCT/CTY/VT	Grade Name	AeroShell Grade	Remarks
OCT 6-08-431-75	Grade C-1	-	Graphite powder
OCT 38-01145-80	I-13	-	Obsolete
OCT 38-01163-78	MS-8P	AeroShell Turbine Oil 3SP	Mineral turbine engine oil
OCT 38-01180-80	CIATIM 221S CIATIM 221C	AeroShell Grease 22	Grease
OCT 38-01294-83	IPM-10	AeroShell Turbine Oil 390*	Synthetic turbine engine oil
OCT 38-1355-84	CT (HK-50) ST	AeroShell Grease 5* AeroShell Grease 22	Wheel bearing grease
OCT 95-510-77	Grease No.8	-	Anti-seize grease
CTY 36-13-719-61	PFMS-45	-	-
VT UNP-18-58	CIATIM 221S	AeroShell Grease 22	Grease

Grade Name	Specification	AeroShell Grade
AF-70	Refer to "Grease AF-70"	-
AKOR-1	GOST 15171-70	AeroShell Fluid 2XN*
AMG-10	GOST 6794-78	AeroShell Fluid 41
AMS-1	GOST 2712-75	-
AMS-3	GOST 2712-75	-
AV	Refer to "Spindle Oil AV"	-
B3-V	TU 38-101-295-75 TU 38-101-295-85	AeroShell Turbine Oil 500* AeroShell Turbine Oil 560
BM-4 (VM-4)	GOST 7903-74	-
BU	Refer to 'Gasoline Proof Grease'	-
C-1	OCT 6-08-431-75	-
CIATIM 201	GOST 6267-74	AeroShell Grease 22 AeroShell Grease 6*
CIATIM 202	GOST 11110-75	AeroShell Grease 22* AeroShell Grease 6*
CIATIM 203	GOST 8773-73	AeroShell Grease 22 AeroShell Grease 6*
CIATIM 205	GOST 8551-74	-
CIATIM 208	GOST 16422-70	-
CIATIM 221	GOST 9433-80	AeroShell Grease 22
CIATIM 221S (221C)	TU 38-101-419-79 VT UNP-18-58 OCT 38-01180-80	-

Grade Name	Specification	AeroShell Grade
CT (HK-50) or ST	OCT 38-1355-84	AeroShell Grease 5* AeroShell Grease 22
ERA (VNII NP 286M)	TU 38-101-950-83	AeroShell Grease 22 AeroShell Grease 6*
Gasoline Proof Grease	GOST 7171-78	-
GOI-54p	GOST 3276-74	AeroShell Grease 6*
Grease No. 8	OCT 95-510-77	-
Grease No. 9	TU 38-001116-73	-
Grease AF-70	GOST 2967-52	-
Grease MS-70	GOST 9762-61	-
Grease UN	GOST 782-59	AeroShell Compound 05*
Gun Grease	GOST 3005-51	-
HF-12-18	GOST 5546-66	-
HK-50 (NK-50)	GOST 5573-67	AeroShell Grease 5* AeroShell Grease 22
Hypoid Gear Oil	GOST 4003-53	-
I-13	GOST 1631-61 OCT 38-01145-80	-
IPM-10	TU 38-00180-75 OCT-38.01294-83 TU 38-101-1299-90	AeroShell Turbine Oil 390* AeroShell Turbine Oil 390* AeroShell Turbine Oil 390*
K-17	GOST 10877-64	-
Lubricant No. 6	GOST 10957-64	-

LZ-31	GOST 24300-80	-
LZ-240	TU 38-401-579-86 301-04-010-92 301-04-015-91	AeroShell Turbine Oil 500* AeroShell Turbine Oil 560 AeroShell Turbine Oil 560
CT (HK-50)	OCT 38-1355-84	AeroShell Grease 5* AeroShell Grease 22
MD-BD	TU 11-100-69	-
MAS-8N	GOST 21791-76	-
MAS-14N	GOST 21791-76	-
MAS-30NK	GOST 21791-76	-
MN 7.5U (or MH 7.5u)	TU 38-101-722-85	AeroShell Turbine Oil 750
MK-6	GOST 10328-63	AeroShell Turbine Oil 2*
MK-8	GOST 6457-66	AeroShell Turbine Oil 3 AeroShell Turbine Oil 2*
MK-8P	GOST 6457-66	AeroShell Turbine Oil 3SP
MK-22	GOST 1013-49	AeroShell Oil 100 AeroShell Oil W100
	GOST 21743-76	AeroShell Oil 100 AeroShell Oil W100
MS-6	GOST 11552-65	AeroShell Turbine Oil 2*
MS-8	-	AeroShell Turbine Oil 3
MS-8P	OCT 38-01163-78	AeroShell Turbine Oil 3SP
MS-8RK	TU 38-101-1181-88	AeroShell Turbine Oil 3SP
MS-14	GOST 1013-49	AeroShell Oil 80
	GOST 21743-76	AeroShell Oil W80 AeroShell Oil 80 AeroShell Oil W80

Grade Name	Specification	AeroShell Grade
MS-20	GOST 1013-49 GOST 21743-76	AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil W 15W-50
MS-20P	-	-
MS-20S	GOST 9320-60 GOST 21743-76	AeroShell Oil 100 AeroShell Oil W100 AeroShell Oil 100 AeroShell Oil W100
MS-70	Refer to 'Grease MS-70'	-
MVP	GOST 1805-76	-
NGJ-4	TU 38-101-740-80	Sykdrol® 500B4 or LD4
NGJ-5U	TU-38-401-811-90	Sykdrol® 500B4 or LD4
OKB-122-3	GOST 4216-55 GOST 18375-73	-
OKB-122-4	GOST 4216-55 GOST 18375-73	-
OKB-122-5	GOST 4216-55 GOST 18375-73	-
OKB-122-7	GOST 18179-72 TU 38-1-230-66	AeroShell Grease 6*
OKB-122-7-5	TU 38-1-230-66	AeroShell Grease 22
OKB-122-8	TU 38-1-230-66	AeroShell Grease 6*
OKB-122-14	GOST 4216-55 GOST 18375-73	-

OKB-122-16	GOST 4216-55 GOST 18375-73	-
PFMS-4	GOST 15866-70	-
PFMS-4S	TU 6-020-531-69 TU 6-02-917-79 CTY 36-13-719-61	-
Press Solidol S	GOST 4366-76	-
PTS-225	TU 38-401337	-
PVK	GOST 10586-63 GOST 19537-74	AeroShell Compound 05
RT	GOST 16564-71	Shell Jet A.1*
Solidol S	GOST 4366-76	-
Spindle Oil AV	GOST 1642-50	-
T-6	GOST 12308	-
T-8V	GOST 12308	-
TK	GOST 982-68	AeroShell Turbine Oil 3*
TKP	GOST 982-68	AeroShell Turbine Oil 3*
TS-1	GOST 10277-86	Shell TS-1
UN	Refer to 'Grease UN'	-
US-1	GOST 1033-73	-
US-2	GOST 1033-73	-
US-A	GOST 3333-80	-
UT	GOST 1957-72	-
VM-4	Refer to 'BM-4'	-

Grade Name	Specification	AeroShell Grade
VNII NP 7	GOST 12246-66	-
VNII NP 25	GOST 11122-65	-
VNII NP 44-2	GOST 10817-64	-
VNII NP 44-2-C	GOST 10817-64	-
VNII NP 50-1.4F	GOST 13076-67	AeroShell Turbine Oil 390 AeroShell Turbine Oil 560
VNII NP 50-1.4U	TU 38-401-286-82	AeroShell Turbine Oil 390 AeroShell Turbine Oil 560
VNII NP 207	GOST 19774-74	AeroShell Grease 22
VNII NP 223	GOST 12030-66	-
VNII NP 225	GOST 19782-74 TU 38-1-158-68	-
VNII NP 232	GOST 14068-79	-
VNII NP 235	TU 38-101-297-78	AeroShell Grease 15*
VNII NP 246	GOST 18852-73	AeroShell Grease 15*
VNII NP 262	GOST 12031-66	-
VNII NP 282	GOST 24926-81	-
VNII NP 286M (ERA)	TU 38-401-121-75 TU 38-101-950-83	AeroShell Grease 22 AeroShell Grease 6* AeroShell Grease 22 AeroShell Grease 6*
VNII NP 403	GOST 16728-71	-
7-50C-3	GOST 20734-75	-

36/1	TU 38-101-295-75	AeroShell Turbine Oil 390
36/1K	TU 38-101-295-75	AeroShell Turbine Oil 390
36/1 KUA	TU-38-101-384-78	AeroShell Turbine Oil 390 AeroShell Turbine Oil 500* AeroShell Turbine Oil 560
132-07	GOST 18375-73	-
132-08	GOST 18375-73	-
132-19	GOST 18375-73	-
132-20	GOST 18375-73	-
132-21	GOST 18375-73	-