

Military Rubber Specification

Military Grade Rubber, Mil-Spec

Listed is a wide range of polymers and styles conforming to military and federal rubber specifications.

MIL-R-6855

Style	Class	Grade	Polymer	Tensile strength psi
M140	1	40	Buna N	1100
M150	1	50	Buna N	1200
M160	1	60	Buna N	1300
M170	1	70	Buna N	1400
M180	1	80	Buna N	1600
M230	2	30	Neoprene	1200
M240	2	40	Neoprene	1300
M250	2	50	Neoprene	1500
M260	2	60	Neoprene	1500
M270	2	70	Neoprene	1600
M280	2	80	Neoprene	1500

Specification Grade Calendered Sheet

Spec	Material	Durometer Hardness	Durometer Tolerance
AMS 3205 Low Temperature	NEOPRENE	50	+/- 5
AMS 3208 Weather Resistant	NEOPRENE	50	+/- 5
AMS 3215 Fuel Resistant	NITRILE	70	+/- 5
MIL-G-1149 TYPE1 CL1 GR50	NEOPRENE	50	+/- 5
MIL-G-1149 TYPE1 CL5 GR50	NITRILE	50	+/- 5
MIL-R-2765	NITRILE	35-55	+/- 5
MIL-R-3065D SC 310 F1	NEOPRENE	30	+/- 5
MIL-R-3065D SC 410 F2	NEOPRENE	40	+/- 5
MIL-R-3065D SC 515 F2	NEOPRENE	50	+/- 5
MIL-R-3065D SC 615 F2	NEOPRENE	60	+/- 5
MIL-R-3065D SC 715 F2	NEOPRENE	70	+/- 5
MIL-R-3065D SC 815 F1	NEOPRENE	80	+/- 5
MIL-R-3065D SB 410 F2	NITRILE	40	+/- 5
MIL-R-3065D SB 515 F2	NITRILE	50	+/- 5

MIL-R-3065D SB 615 F2	NITRILE	60	+/- 5
MIL-R-3065D SB 715 F2	NITRILE	70	+/- 5
MIL-R-3065D SB 815 F2	NITRILE	80	+/- 5
MIL-R-6855 1(40)	NITRILE, FUEL RESISTANT	40	+/- 5
MIL-R-6855 1(50)	NITRILE, FUEL RESISTANT	50	+/- 5
MIL-R-6855 1(60)	NITRILE, FUEL RESISTANT	60	+/- 5
MIL-R-6855 1(70)	NITRILE, FUEL RESISTANT	70	+/- 5
MIL-R-6855 1(80)	NITRILE, FUEL RESISTANT	80	+/- 5
MIL-R-6855 2(40)	NEOPRENE, OIL RESISTANT	40	+/- 5
MIL-R-6855 2(50)	NEOPRENE, OIL RESISTANT	50	+/- 5
MIL-R-6855 2(60)	NEOPRENE, OIL RESISTANT	60	+/- 5
MIL-R-6855 2(70)	NEOPRENE, OIL RESISTANT	70	+/- 5
MIL-R-6855 2(80)	NEOPRENE, OIL RESISTANT	80	+/- 5
MIL-R-21252	EPDM	85	+/- 5
MIL-R-83285 GR80	EPDM	80	+/- 5
ASTM D 2000 OR MIL-R-3065E			
M4AA 407 A13 B13 C12 F19	EPDM	40	+/- 5
M2AA 510 A13 B13 C12 F19	EPDM	50	+/- 5
M2AA 610 A13 B13 C12 F19	EPDM	60	+/- 5
M2AA 710 A13 B13 C12 F19	EPDM	70	+/- 5
M2BC 407 A14 B14 C12 E034 F17	NEOPRENE	40	+/- 5
M2BC 510 A14 B14 C12 E034 F17	NEOPRENE	50	+/- 5
M2BC 610 A14 B14 C12 E034 F17	NEOPRENE	60	+/- 5
M2BC 710 A14 B14 C12 E034 F17	NEOPRENE	70	+/- 5
M5BG 407 A14 B14 E014 E034 F17	NITRILE	40	+/- 5
M5BG 510 A14 B14 E014 E034 F17	NITRILE	50	+/- 5
M5BG 610 A14 B14 E014 E034 F17	NITRILE	60	+/- 5
M5BG 710 A14 B14 E014 E034 F17	NITRILE	70	+/- 5

Temperature Range °F									
Specification	Elastomer	Static	Dynamic	Fluid or Application Type	Min	Max	Compound	REPLACED BY MATERIAL SPEC.	Comments
MILG22050	ETHYLENE PROPYLENE (EPR)	N.A.	N.A.	hot air, hot water, steam & monoethanolamine	-40	230	5714-65	N.A.	N.A.
MILP25732	NITRILE	YES	YES	MIL-H-5606 & MIL-H-83282	-65	275	4067-70	N.A.	N.A.
MILP5315	NITRILE	N.A.	N.A.	aircraft fuels	-65	180	0457-60	AMSP5315	N.A.
MILP83461	NITRILE	YES	YES	AMS 3020 & MIL-H-83282	-65	275	4367-70	AMSP83461	N.A.
MILR2765	NITRILE	N.A.	N.A.	air petroleum oil & fuel	-20	158	2159-50	N.A.	N.A.
MILR6855	CHLOROPRENE (NEOPRENE)	N.A.	N.A.	petroleum oil & weather and ozone	-67	212	0376-60	MILR6855	N.A.
MILR83248	FLUOROCARBON (FLUOREL/VITON)	YES	YES	aircraft fuels & lubricants	5	400	9009-75	AMS7276	class 1 tolerances required, may

									need special tool and/or processing
MILR83485	FLUOROCARBON (FLUOREL/VITON)	YES	YES	aircraft fuels & lubricants	-25	400	9006-75	AMSR83485	base elastomer is Viton
AMS3215	NITRILE	N.A.	N.A.	aircraft fuels	-15	212	4200-70	N.A.	N.A.
AMS3302	SILICONE	N.A.	N.A.	petroleum-base lube oil & weather resistant	-85	401	1235-50	N.A.	N.A.
AMS3304	SILICONE	N.A.	N.A.	dummy loads & petroleum-base lube oil	-85	401	1235-70	N.A.	standard o ring size
AMS7276	FLUOROCARBON (FLUOREL/VITON)	N.A.	N.A.	aircraft fuels, lubricants & hydraulic fluids	-20	400	9009-75	N.A.	rated for higher temp. and lower compression set than MS9387 or AS3084
AMSP5315	NITRILE	YES	YES	aircraft fuels	-65	180	0457-60	MILP5315	non-standard o-ring size
AMSP5510	NITRILE	N.A.	N.A.	hydraulic fluid & pneumatic systems	-65	160	4081-90	N.A.	hydraulic fluid & excellent low temp. flexibility
AMSP83461	NITRILE	YES	YES	AMS 3020 & MIL-H-83282	-65	275	4367-70	MILP83461	N.A.