



POLYURETHANE (1 of 2)

Material data sheet for polyurethane parts produced by vacuum casting.

Name	Color	Similar to	Properties	Shore	Density (25 °C) g/cm ³	Flexural modulus of elasticity MPa	Flexural strength MPa	Elongation at break %	Charpy-impact strength kJ/m ²	Max. tensile strength MPa	Tensile modulus of elasticity MPa	Glass transition temperature (T _g) °C	Heat deflection temperature °C
Elastic Vacuum Casting Resin													
FIT45 - 30 A	Whitish	Rubber	High tear strength	30 A	1.1	-	-	475	-	2.2	-	-	70
FIT45 - 40 A	Whitish	Rubber	High tear strength	40 A	1.1	-	-	350	-	2.5	-	-	70
FIT45 - 50 A	Whitish	Rubber	High tear strength	50 A	1.1	-	-	-	-	-	-	-	70
FIT45 - 60 A	Whitish	Rubber	High tear strength	60 A	1.1	-	-	-	-	-	-	-	70
FIT45 - 70 A	Whitish	Rubber	High tear strength	70 A	1.1	-	-	-	-	-	-	-	70
FIT45 - 80 A	Whitish	Rubber	High tear strength	80 A	1.1	-	-	-	-	-	-	-	70
FIT45 - 95 A	Whitish	Rubber	High tear strength	95 A	1.1	-	-	300	-	20.4	-	-	70
Semi-Rigid Vacuum Casting Resin													
FIT PU 55	Amber	PP/HDPE	Good temperature resistance	50-55 D	1.08	-	-	750	-	15	-	-	-40/+90
FIT PU 56	Amber	PP/HDPE	High shock absorption, no break, flexible	70 D	-	580	24	50	21	20	650	-	80
FIT PU 57	Whitish	PP/HDPE	suits well for latches and snap-fits	75 D	-	900	35	35	60	32	1,000	>120	95
FIT PU 57 GF	Whitish	PP/HDPE	suits well for latches and snap-fits	75 D	-	1,800	-	6	-	45	-	>120	95

Mentioned mechanical properties are optimum values according to manufacturer.

Affiliates:



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Rigid Vacuum Casting Resin													
FIT PU 63	White	ABS	Impact strength, easily dyeable	80 D	1.13	2,050	80	5	-	56	1,850	110	100
FIT PU 65	Black	ABS	High temperature range (up to 130 °C)	80 D	1.14	2,300	80	13	60	60	1,800	-	130
FIT PU 65 GF	Black	ABS-GF	High temperature range (up to 130 °C)	80 D	1.14	2,700	-	3	-	68	-	-	130
FIT PU 67	White/yellowish	PA 6.6/PPS/PEEK	High temperature resistance	80 D	1.19	1,850	80	13	41	61	-	220	195
FIT PU 68 GF	Whitish	PA GF	High rigidity, high flexural strength	85 D	1.2	4,500	150	3	30	85	-	95	90
Transparent Vacuum Casting Resin													
FIT PU 71	Transparent	Rubber	Easily dyeable, UV resistant	25 D	1.04	-	-	170	-	5	-	-	-
FIT PU 72	Transparent	PC/PMMA	Easily dyeable, UV resistant	85 D	1.06	2,400	110	7.5	48	66	2,400	95	85
Flame retardant Vacuum Casting Resin													
FIT PU 81	Black	Rubber	Self-extinguishing, low tear strength, UL94:V-0	55 A	1.3	-	-	267	-	2.1	-	-50 up to +120	N/A
FIT PU 82	Dark brown	ABS	Self-extinguishing, hardly inflammable, UL94:V-0	80 D	1.15	1,500	65	5	-	60	-	-	130
Silicones													
FIT SI 40A	Opaque-transparent	Silicone	Highly flexible, extreme tear strength	40 A	1.1	-	-	360	-	5.5	-	-	-
FIT SI 60A	Beige	Silicone	High mechanical strength	60 A	1.35	-	-	140	-	4.5	-	-	-

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