

Vacuum Casting - Polyurethane Material Comparison Sheet

	Units	PX527*	PX245*	PX234 HT*	PX223 HT*	PX522 HT*	PX330*	PX205*	F25-A**	F42-A**	F60-A**	F70-A**	F80-A**	F85-A**
Material Description		Rigid PU	Rigid PU	Rigid PU	Rigid PU	Rigid PU	Rigid PU	Semi-Rigid PU	PU Elastomer	PU Elastomer	PU Elastomer	PU Elastomer	PU Elastomer	PU Elastomer
Applications		PS / filled ABS	POM / GF PA	PA6.6 / PPS / PEEK	ABS	PMMA / cristal PS / PC	Flame Retardant ABS	PP / PEHD	Rubber	Rubber	Rubber	Rubber	Rubber	Rubber
Appearance		transparent	off-white	light amber	black	transparent	off-white	beige	light yellow	translucent yellow	translucent cream	translucent yellow	opaque white	buff opaque
Specific Gravity		1.15	1.20 - 1.25	1.19	1.12 - 1.16	1.04 - 1.08	1.33	1.08	1.03	1.07	1.06	1.05	1.08	1.08
Shore Hardness	D1 / A1	82	85	80	80	80	87	70	25A	42A	60A	70A	80A	85A
Tensile Strength	MPa	73	85	61	60	75	70	25	2.38	5	4.7	6.5	13	17.1
Tensile Modulus	MPa			1800		2700	3700	530	0.35		2.2	2.9		
Elongation at Break	%	13	3	13	11	9	2.9	100	1100	1080	300	315	377	275
Flexural Strength	MPa	117	150	80	80	105	119	30						
Flexural Modulus	MPa	2600	4500	1850	2300	2100	3300	500						
Impact Strength	kJ/m ²	>100	30	41	>60	27	30							
Heat Deflection (HDT)	°C		92			100		55						
Glass Transition (TG)	°C	90	95	220	>120	110	100	90-100						
Tear Strength	kN/m								7.9	11.4	10	15.2	23	31.5
Flammability Rating	FAR 25 UL 94						2.2 VO							

* Data referenced from Axson Product datasheets. Full Datasheets available on request.

** Data referenced from Techsil Product datasheets. Full Datasheets available on request.