

Synthetic bristles

	Physical properties			Chemical resistance (see also Detailed Chemical Information p.35)									
	Colours	Diameter	Specific weight (g/cm ³)	Abrasion resistance (PA 6.12 = 100 %)	Operating temperature resistance – dry (°C)	Operating temperature resistance – wet (°C)	Water absorption in case of immersion	Watery alkalis	Diluted organic solvents at 20° C	Mineral acids 2 parts diluted	Organic solvents		
PA6	transparent / black	0.08 - 2.5 mm	1.14	75	-20° to +100°	+90	9.5%	+	+	-	0	The most commonly used filament material for general use in technical brushes. It is resistant to weak acids and bases, but vulnerable to mineral acids; its water absorption rate is approx. 9.5% and it has an operating temperature limit of 115°C.	
PA6.6	transparent / black	0.08 - 1.5 mm	1.14	85	-25° to +120 °	+100	8.5%	+	+	-	0	Differs from Nylon 6 through its inferior water absorption and its slightly higher abrasion resistance.	
PA6.12	white / black	0.08 - 2.5 mm	1.08	100	-20° to +110°	+100	3.0%	+	+	-	0	Used in qualitatively superior brushes with an extremely high abrasion and deformation resistance; otherwise as Nylon 6. For use in wet environments such as labelling or where brushes are permanently fluid immersed (e.g. washers), generally for the most demanding requirements.	
PBT	transparent	0.20 - 2.5 mm	1.31	80	-20° to +100°	+60	0.3%	+	+	+	+	Less expensive than PA 6.12. Very low water absorption. For fluid applications up to +60°C; very good elastic memory. Does not easily straighten if bent back.	
PP	transparent / black	0.10 - 2.0 mm	0.91	60	-10° to +80°	+90	0.1%	+	+	+	0	No water absorption, good resistance to chemicals, elastic memory and abrasion resistance inferior to that of PA 6 – 6.12 and PBT. Used, for example, on electroplating lines, or for exterior applications, to seal doors etc.	
PEK	yellow tint	0.20, 0.40 und	1.36	110	-20° to +190°	+190	1.0%	+	+	+	+	Used for high temperature applications e.g. the sealing of drying equipment. Very good chemical resistance as well as resistance to hydrolysis and flame (UL94). Note! It is not uv-resistant.	

Other colours available on request