

Filament material

Fibre	Abbreviation	Colour	Fibre diameter (mm)	Working temperature (°C)	Resistance for work in chemicals			Qualification
					Material absorption during work in water	pH <7	pH >7	
Plastic fibres								
Polyamide 6 - (Silon/Nylon)	PA 6	White or transparent	0,15 -1,7	<-20 , + 80>	9,50%	-	+	Fibre due to its high wear resistance and flexural strength (fibre has a shape memory) in particular suitable for application during industrial brush production. Due to its water absorption we normally use better-quality fibre 6.6
		Black						
		x						
Polyamide 6.6 (Silon/Nylon)	PA 6.6	White or transparent	0,15-0,9	<-20 ,+ 100>	8,50%	-	+	We normally deliver brushes from this fibre - best wire for production of industrial brushes, excellent qualitative features for reasonable price, excellent wear resistance and good parameters for max. working temperature
		Black						
		x						
Polyamide 6.12 *(Silon/Nylon)	PA 6.12	White or transparent	0,075	<-20 ,+ 85>	3,00%	-	+	Fibre has better resistance to absorption, yet is is markedly more expensive than PA 6 or 6.6)
		Black						
		x						
Polyamide 6 - antistatic (Silon/Nylon)	PA	White or transparent Black	0,3	<-20 , + 80>	9,50%	-	+	See PA 6, Resistance 10 ⁷ - 10 ¹² Ohm/cm, according to DIN 54345
Polyamide 6 electroconductive * (Silon/Nylon)	PA	White or transparent Black	0,3	<-20 , + 80>	9,50%	-	+	See PA 6, conductivity according to European standards < 10 ⁷ Ohm
Polypropylene (Myprene)	PP	White or transparent	0,15-0,7, 1,5, 2x3	<-20 , + 70>	0,00%	+	-	Does not absorb water, it has no flexural strength (no shape memory), ca. 2x smaller wear resistance with commensuration of PA
		Black						
		x						
Polyvinyl chloride (PVC)	PVC	red	1,2	<-20 , + 55>	0,00%	+	-	Cheap fibre. The fibre is self-extinguishing, however it has bad parameters concerning wear resistance and it breaks easily
Polyethylene (Mylex)- car washes	Mylex	assorted colors	0,8, 1, 0,55	<-20 , + 45>	0,00%	+	0	Fibre suitable particularly for car, bus and other washes.
Polyester	PET	red	0,9	<-20 , + 55>	0,30%	+	-	Cheap fibre. We use this fibre for brooms only.
Pekalon	-	natural	0,3	<-20 , + 200>	0,15%	+	+	Fibre suitable for workplaces where higher temperatures cannot be avoided. The fibre has good wear resistance and flexural strength.
Polymex	-	black	0,2	<-20 , + 80>	0,30%	+	+	
Plastic fibres - abrasive								
Abralon -SIC		Grey	0,25- 1,6	<-20 ,+ 85>	3,00%	-	+	The same properties as PA 6.12, the fibre has excellent abrasive qualities - 25% of SIC grain
Abralon - DM		Transparent	2	<-20 ,+ 85>		-	+	The same properties as PA 6.12, the fibre has excellent abrasive qualities - 10-20% of DM grain
Animal fibres								
Pig bristle		Natural white	-	<-20 ,+ 150>	35,00%	0	0	The fibre is slightly electrostatic and has relatively high working temperature. Therefore it is for instance used for sweeping wood or in businesses where heat resistance is stressed.
		Black	-					
Goat hairs		Natural white	-	<-20 ,+ 150>	35,00%	0	0	The fibre is slightly electrostatic and has relatively high working temperature. The fibre is very fine and therefore suitable for cosmetic purposes and for fine cleaning.
		Natural black	-					
Horse hair		Natural white	-	<-20 ,+ 150>	35,00%	0	0	The fibre is slightly electrostatic and has relatively high working temperature. Therefore it is for instance used for sweeping wood or in businesses where heat resistance is stressed. The fibre is softer compared to bristle.
		Natural black	-					
Vegetable fibres								
Coconut fibre		Natural brown	-	<-20 ,+ 160>	35,00%	0	0	Special application particularly to brooms for businesses with high requirements of heat resistance.
Basina fibre		Natural brown	-	<-20 ,+ 85>				Material is suitable for production of brooms from natural material, the fibre is processed with certain difficulty.
Tampico fibre		Natural yellow	-	<-20 ,+ 160>				The fibre is slightly electrostatic and slightly abrasive, it is mainly used for sweeping or slight sanding of wood.
Cotton		Natural white	-	<-20 ,+ 85>				The fibre is used for twisted in brushes, in applications with demand of no scratches over the cleaned holes and also if lubrication is needed.
Arenga		Natural brown	-	<-20 ,+ 85>				Material is suitable for production of brooms from natural materials, the fibre is processed with certain difficulty.
Mixtures								
Mixture - 50% bristle 50% polyamide		Black	0,3	<-20 ,+ 100>		-	+	For special applications only
Mixture - 50% black bristle 50% black polyamide		Black	0,3	<-20 ,+ 100>	8,5%-35%	-	+	For special applications only
Mixture - 50% white bristle 50% black polyamide		Black+white	0,3	<-20 ,+ 100>		-	+	For special applications only

Fibre	Abbreviation	Colour	Fibre diameter (mm)	Working temperature (°C)	Material absorption during work in water	pH <7	pH >7	Qualification
Filament wire								
Brass wire		Brass metallic	0,1-0,35	<-20 , + 300>	0,00%	o	o	Brass wires are harder than plastic fibres, yet more fragile, too, i.e. they break easily and the brush durability is shorter. They have good chemical resistance. Frequent applications during treatment of metallic and wooden surfaces.
Bronze wire		Bronze metallic	0,08-0,3	<-20 , + 300>	0,00%	o	o	Bronze fibres are harder than plastic and brass fibres. They are also more fragile than plastic fibres, they break easily which results in shorter durability of the brush. They have good chemical resistance. Frequent applications during treatment of metallic and wooden surfaces. Better electroconductivity compared to brass wire.
Steel wire		Steel metallic	0,08-0,4	<-20 , + 400>	0,00%	o	o	Steel fibres are the hardest possible fibres. They are more fragile than plastic fibres, they break easily which results in shorter durability of the brush. They have good chemical resistance. Frequent applications during treatment of metallic and wooden surfaces.
Flat wire		Steel metallic	0,6x3,3 or 0,45x1,8	<-20 , + 80>	0,00%	o	o	For special applications only, brushes for road sweepers

Legend:

- x other colour on request
- + excellent resistance
- bad resistance
- o suitable