

Medical Equipment Cable Jacket Material Solution (TPU/TPE)



Application Advantages

T P U Jacket Material

- 1.Authoritative certification:**
passed ISO10993 “bio-compatibility” test (authoritative verification report attached) ;
- 2.Safety and reliability:**
pass a series of comprehensive tests: alcohol resistance, microbial resistance, acid and alkali resistance, hydrolysis resistance (85°C&85%RH , 1000Hrs) test;
- 3.Outstanding Elasticity:**
In lower hardness condition (≤80A, it shows excellent elastic modulus, which is very suitable for medical slingshot line sheath application;
- 4. Excellent touch:**
By introducing rubber functional groups into the material, medical cable sheath presents a very soft and smooth silicone handle and a even & fine matte appearance.

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- 3.Gentle touch:**
Comparing with TPU cable sheath, TPEs cable sheath presents a softer touch;
- 4.High cost performance ratio:**
low density (≤0.95), high processing efficiency, best solution for discarded medical cable sheath.

Properties Datasheet

					Model	Model	Model	Model
General characteristics	Material properties	Testing standard	Test condition	Units	1182F	1175F	1075F	5060E
	Material category	-	-	-	TPU polyether	TPU polyether	TPU polyester	SBC
	Appearance (light/Semi-matte/Frosted)	-	-	-	Frosted	Frosted	Frosted	Frosted
	Extrusion/injection	-	-	-	Extrusion	Extrusion	Extrusion	Extrusion
Physical characteristics	Hardness	DIN 53505	155	Shore A	84	84	77	60
	Proportion	DIN 53479	-	g/cm³	1.08	1.08	1.17	0.95
	Melt index	DIN 53735	230°C/5kg	g/10min	5	5	5	0.1
	Brittle temperature	ISO 812	-	°C	-60	-60	-50	-50
Mechanical properties	Elongation	DIN 53504	200mm/min	%	550	550	600	400
	Tensile Strength	DIN 53504	200mm/min	Mpa	30	30	25	7
	Tearing strength	DIN 53515	500mm/min	KN/m	70	60	60	30
Hot air aging	Elongation retention rate	DIN 53504	158°C/168h	%				
	Tensile strength retention	DIN 53504	158°C/168h	%				
Electrical performance	Volume resistivity	ASTM D257	-	Ohm-cm	≥1.0E+11	≥1.0E+11	≥1.0E+11	≥1.0E+15
Combustion performance	Vertical burning test	UL 94	3.0/6.0mm	-	V2(3.0mm)	V2(3.0mm)	V2(3.0mm)	HB(3.0mm)
Feature					Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility



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