



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.

T P E Jacket Material

1.Authoritative certification:

passed ISO10993 "bio-compatibility" test;

2.Safety and reliability:

pass a series of comprehensive tests: alcohol resistance, microbial resistance, acid and alkali resistance, hydrolysis resistance ($85^{\circ}C\&85^{\circ}RH$, 1000Hrs) test;

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.



Medical Equipment Cable Jacket Material

Properties Datasheet

				Model	Model	Model	Model
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
Handana	DIN FOFOE	155	Chana A	0.4	0.4	77	60
	DIN 53479	-	g/cm³	1.08		1.17	0.95
Melt index	DIN 53735	230°C/5kg	g/10min	5	5	5	0.1
Brittle temperature	ISO 812	-	℃	-60	-60	-50	-50
Elongation	DIN 53504	200mm/min	%	550	550	600	400
Tensile Strength	DIN 53504	200mm/min	Мра	30	30	25	7
Tearing strength	DIN 53515	500mm/min	KN/m	70	60	60	30
Elongation retention rate	DIN 53504	158℃/168h	%				
Tensile strength retention	DIN 53504	158℃/168h	%				
Volume resistivity	ASTM D257	-	Ohm-cm	≥1.0E+11	≥1.0E+11	≥1.0E+11	≥1.0E+15
Vertical burning test	UL 94	3.0/6.0mm	-	V2(3.0mm)	V2(3.0mm)	V2(3.0mm)	HB(3.0mm)
				Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility	Meets ISO 10993 biological compatibility
	Material category Appearance (light/Semi-matte/Frosted) Extrusion/injection Hardness Proportion Melt index Brittle temperature Elongation Tensile Strength Tearing strength Elongation retention rate Tensile strength retention Volume resistivity	Material category - Appearance (light/Semi- matte/Frosted) - Extrusion/injection - Hardness DIN 53505 Proportion DIN 53479 Melt index DIN 53735 Brittle temperature ISO 812 Elongation DIN 53504 Tensile Strength DIN 53504 Tearing strength DIN 53515 Elongation retention rate DIN 53504 Tensile strength retention DIN 53504 Volume resistivity ASTM D257	Material category Appearance (light/Semi-matte/Frosted) Extrusion/injection Hardness DIN 53505 155 Proportion DIN 53479 - Melt index DIN 53735 230°C/5kg Brittle temperature ISO 812 - Elongation DIN 53504 200mm/min Tensile Strength DIN 53504 200mm/min Tearing strength DIN 53504 200mm/min Elongation retention rate DIN 53504 158°C/168h Tensile strength retention DIN 53504 158°C/168h Volume resistivity ASTM D257 -	Material category - - - Appearance (light/Semi-matte/Frosted) - - - Extrusion/injection - - - Hardness DIN 53505 155 Shore A Proportion DIN 53479 - g/cm³ Melt index DIN 53735 230°C/5kg g/10min Brittle temperature ISO 812 - °C Elongation DIN 53504 200mm/min % Tensile Strength DIN 53504 200mm/min KN/m Elongation retention rate DIN 53504 158°C/168h % Tensile strength retention DIN 53504 158°C/168h % Volume resistivity ASTM D257 - Ohm-cm	Material properties Testing standard Test condition Units 1182F Material category - - - TPU polyether Appearance (light/Semi-matte/Frosted) - - - Frosted Extrusion/injection - - - Extrusion Hardness DIN 53505 155 Shore A 84 Proportion DIN 53479 - g/cm³ 1.08 Melt index DIN 53735 230°C/5kg g/10min 5 Brittle temperature ISO 812 - °C -60 Elongation DIN 53504 200mm/min % 550 Tensile Strength DIN 53504 200mm/min Mpa 30 Tearing strength DIN 53504 158°C/168h % Elongation retention rate DIN 53504 158°C/168h % Volume resistivity ASTM D257 - Ohm-cm ≥1.0E+11 Vertical burning test UL 94 3.0/6.0mm - V2(3.0mm)	Material properties Testing standard Test condition Units 1182F 1175F Material category - - - TPU polyether TPU polyether Appearance (light/Semi-matte/Frosted) - - - Frosted Frosted Extrusion/injection - - - Extrusion Extrusion Hardness DIN 53505 155 Shore A 84 84 Proportion DIN 53479 - g/cm³ 1.08 1.08 Melt index DIN 53735 230°C/5kg g/10min 5 5 Brittle temperature ISO 812 - °C -60 -60 Elongation DIN 53504 200mm/min % 550 550 Tensile Strength DIN 53504 200mm/min Mpa 30 30 Tearing strength DIN 53504 158°C/168h % Volume resistivity ASTM D257 - Ohm-cm ≥1.0E+11 ≥1.0E+11 Vertical burning test	Material properties Testing standard Test condition Units 1182F 1175F 1075F Material category - - - TPU polyether TPU polyether TPU polyether Appearance (light/Semi-matte/Frosted) - - - Frosted Frosted Frosted Extrusion Extrusion Extrusion Extrusion Hardness DIN 53505 155 Shore A 84 84 77 Proportion DIN 53505 155 Shore A 84 84 77 Melt index DIN 53799 - g/cm³ 1.08 1.17 Melt index DIN 53795 230°C/5kg g/10min 5 5 5 Brittle temperature ISO 812 - °C -60 -60 -50 Elongation DIN 53504 200mm/min % 550 550 600 Teasile Strength DIN 53504 158°C/168h % - - - - - -





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