

MT-2000

HDPE Heat Shrink Tubing

Applications

- Abrasion protection for electrosurgical devices
- High performance insulation for electrosurgical devices



PROFILE

- Shrink ratio ≤ 3:1*
- Full recovery at 140°C (284°F) minimum
- Supports sterilization environments: gamma and ethylene oxide (ETO)
- Manufactured to ISO 10993 standards
- Registered with the FDA: MAF-727
- · Custom sizing, colors, finishing and value-add options available
- · Radiopacity can be customized

*Select sizes

ABOUT

- MT-2000 is a crosslinked high density polyethylene (HDPE) heat shrink tubing and offers excellent abrasion protection and high performance insulation.
- Its homogeneous structure (properties evenly distributed) contributes to its consistency and high performance, making our MT-2000 essentially free from flaws, defects, pinholes, seams, cracks or inclusions.
- MT-2000 is semi-rigid and mechanically tough, with high insulating properties, making our MT-2000 a great option for electrosurgical device applications.

TABLE 1: DIMENSIONS

Chandrad Ciara	As Supplied		Recovered								
Standard Sizes	Inside Diamete	Minimum (D)	Inside Diameter	Maximum (d)	Wall Thickne			kness (ss (W)		
	mside Diamete	r Millimum (D)	mside Diameter	Maximum (u)	Minimum		Maximum		Nominal		
Size	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
1mm	.040	1.0	.018	0.45	.008	0.20	0.12	0.30	.010	0.25	
2mm	.080	2.0	.032	0.80	.008	0.20	0.12	0.30	.010	0.25	
3mm	.120	3.0	.048	1.20	.008	0.20	0.12	0.30	.010	0.25	
6mm	.240	6.0	.096	2.4	.008	0.20	0.12	0.30	.010	0.25	
10mm	.400	10.0	.160	4.0	.012	0.30	0.16	0.41	.014	0.36	

TABLE 2: PROPERTIES

Property	Unit	Requirement	Test Method
Physical			
Dimensions*	inches (mm)	In accordance with Table 1	
Longitudinal change*	percent	+0, -10 maximum	ASTM D 2671
Concentricity as supplied*	percent	60 minimum	ASTM D 2671
Tensile strength*	psi (MPa)	3000 minimum <i>(20.7)</i>	ASTM D 2671,
Ultimate elongation*	percent	200 minimum	20"/minute
Secant Modulus* (expanded)	psi (MPa)	5.0 x 10 ⁴ minimum <i>(344)</i>	ASTM D 2671
Heat resistance 168 hours at 250 ± 5°C (482°F) Followed by test for:			ASTM D 2671, 20"/minute
Ultimate elongation	percent	200 minimum	
Electrical Dielectric strength	volts/mil (volts/mm)	1000 minimum (39.36)	ASTM D 2671
Dielectric withstand 3000V, 60Hz	sec	60 minimum	ASTM D 2671
Chemical Fluid resistance 24 hours at 23 ± 3°C (77 ± 5°F) Isopropyl alcohol 5% saline solution Disinfectant			ASTM D 2671
Followed by tests for: Dielectric strength	volts/mil (volts/mm)	1000 minimum (39.36)	
Tensile strength	psi (MPa)	3000 minimum <i>(20.7)</i>	ASTM D 2671
Heavy metals analysis Cadmium Mercury Lead Bismuth Antimony	ppm	1 maximum (total of all metals)	USP XXII Physiochemical tests-plastic (Note 1)

^{*}Denotes lot acceptance test

Note 1: Sample preparation and extraction is per USP XXII. Metals analysis may be colorimetric as described in USP XXII or by equivalent quantitative analytical method.