

# UNSINTERED PTFE TAPES

## STANDARD – ES Series



Technetics' ES Series (Standard) of unsintered PTFE tapes (a.k.a. "Extruded Tapes") provide excellent chemical and mechanical properties making them a great choice for applications requiring high operating temperature and chemical resistance. Once sintered, coefficient of friction is similar to regular skived PTFE tapes and films. Its

electrical properties also make this series suitable for using in less critical wire and cable applications.

### APPLICATIONS:

- **Non-critical wire and cable Insulation and jacketing**
- **Binder tape for cable bundles**

### FEATURES

- Standard (Natural, White, Red, Blue, Yellow, Green, Black) and Special colors (Brown, Orange, Violet, Gray); custom color shades can be developed upon request.
- Thickness from 0.0020" (0.051mm)
- Widths from 5/32 (4mm) to 7" (178mm)
  - Check our [Widths and Packages flyer](#) for details on winding types
- Physical and mechanical properties meet ASTM D6585 and AS22759
- High temperature of operation
- Continuous long lengths from 3,000ft (914m) up to 13,500ft (4115m)
- Excellent chemical resistance, mechanical and chemical performance
- All colors are RoHS, REACH and California Prop 65 compliant
















### TYPICAL PROPERTIES

Unsintered PTFE Tapes - Standard					
Thickness	0.0020" (0.051mm)	0.0025" (0.064mm)	0.0030" (0.076mm)	0.0035" (0.089mm)	0.0040" (0.102mm)
Density (SPG)	1.6 g/cm <sup>3</sup>				
Tensile Strength <sup>1</sup> (Machine Direction)	2,600 psi (17.9 MPa)	2,200 psi (15.2 MPa)	2,000 psi (13.8 MPa)	2,000 psi (13.8 MPa)	1,900 psi (13.1 MPa)
Elongation at Break <sup>1</sup> (Machine Direction)	75%	75%	100%	100%	100%
Dielectric Strength (breakdown voltage)	1,000 V/mil (39.4 kV/mm)				

The values above are for reference only and should not be used as specification

<sup>1</sup> Different colors and base resins may lead to different values

**COLORS**

		DARKEST	LIGHTEST	ACTUAL	TAPE COLOR BEFORE SINTERING
<b>Standard Colors</b> Darkest and Lightest shades according MIL-STD-104 (Class 1) and EIA-359-A.	<b>BLACK</b>		 --- 2.3/0.5	 ECLIPSE BLACK	
	<b>RED</b>	 10RP 3/10	 5.5R 5/27	 VALENCIA RED	
	<b>BLUE</b>	 7.5B 3/8	 5PB 5.2/25	 MARINER BLUE	
	<b>YELLOW</b>	 1.25Y 7.5/8	 8.75Y 9.5/21	 STARSHIP YELLOW	
	<b>GREEN</b>	 5GY 4/8	 5G 6/31	 EUCALYPTUS GREEN	
<b>Special Colors</b> Darkest and Lightest shades according MIL-STD-104 (Class 1) and EIA-359-A.	<b>ORANGE</b>	 10R 5/10	 5YR 5/21	 SIENNA ORANGE	
	<b>BROWN</b>	 7.5R 2.5/4.5	 7.5YR 4.5/8	 IRONSTONE BROWN	
	<b>VIOLET</b>	 10PB 3/5.5	 5P 5.5/31	 STUDIO VIOLET	
	<b>GRAY</b>	 --- 4.5/0	 --- 6/0.5	 ALUMINUM GRAY	

Warning: Properties shown on this document are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations, consult Technetics PTFE & Polymer Solutions. While the utmost care has been used in compiling this document, we assume no responsibility for errors. This edition cancels all previous issues. Subject to change without notice.