

**SHRINK RATIO: 4:1**  
**RoHS COMPLIANT**  
**FLAME RETARDANT (EXCEPT CLEAR)**  
**UL RECOGNIZED COMPONENT**  
**E306685 cUL CERTIFIED**  
**AMS-DTL-23050/4 CLASS 3**

GMT-421AL is an adhesive lined highly flexible high shrink ratio polyolefin heat shrinkable tube. The increased shrink ratio allows coverage for irregular sizes. It has excellent physical, chemical, and electrical properties. Few sizes cover a variety of diameters, which allows for inventory reduction and coverage for irregular shapes.

#### Applications:

- Insulation and strain relief for wire terminations, electrical connections, and terminations
- Adhesive lining provides connector to cable connections, high moisture resistance and excellent sealant. Adhesive bonds to a variety of plastics, metals, and rubbers; including polyethylene, aluminum, steel, and copper.



#### Characteristics

- Operating Temperature: -45 to 125°C
- Shrink Temperature: 125°C
- Flame Retardant (Except Clear)
- Shrink Ratio: 4:1
- Environmentally Friendly
- Colors: Standard Packages Available in Black,
- Colors Available Upon Request

## Tubing Physical and Electrical Properties

Property	Test Method	Standard	Typical Performance
Tensile Strength, MPa	ASTM D2671	≥10.4	11.5
Elongation at Break, %	ASTM D2671	≥300	450
Tensile Strength after Aging, MPa	UL224 158°Cx168Hrs	≥7.3	8.5
Elongation at Break after Aging, %	UL224 158°Cx168Hrs	≥200	350
Flammability	ASTM D2671B		Self-Extinguish within 30s
Dielectric Strength, kV/mm	IEC243	≥15	17.5
Volume Resistivity, Ω-cm	ASTM D876	≥10 <sup>14</sup>	2.5x10 <sup>14</sup>

## Adhesive Physical Properties

Property	Test Method	Standard
Water Absorption, %	ASTM-D570	≤0.2
Softening Point, °C	ASTM E28	95±5
Peel Strength (PE), N/25mm	ASTM D1000	120
Peel Strength (AL), N/25mm	ASTM D1000	80

## Dimensions

Gamma Part NO. W/ Size	As Supplied		After Recovery						Standard Length per Bag
	Minimum Inner Diameter		Maximum Inner Diameter		Total Wall Thickness		Adhesive Wall Thickness		
	mm	in	mm	in	mm	in	mm	in	
GMT-421AL-4/1-(SP or 4FT)-(CC)	4	0.236	1.0	0.039	1	0.0394	0.40	0.016	100
GMT-421AL-6/1.5-(SP or 4FT)-(CC)	6	0.236	1.5	0.059	1.1	0.0433	0.40	0.016	100
GMT-421AL-8/2-(SP or 4FT)-(CC)	8	0.315	2.0	0.079	1.5	0.0591	0.50	0.020	100
GMT-421AL-12/3-(SP or 4FT)-(CC)	12	0.472	3.0	0.1180	1.7	0.0669	0.50	0.020	100
GMT-421AL-16/4-(SP or 4FT)-(CC)	16	0.630	4.0	0.158	2.0	0.0787	0.60	0.024	20
GMT-421AL-24/6-(SP or 4FT)-(CC)	20	0.787	5.0	0.197	2.3	0.0906	0.60	0.024	20
GMT-421AL-24/6-(SP or 4FT)-(CC)	24	0.945	6.0	0.236	2.5	0.0984	0.60	0.024	20
GMT-421AL-52/13-(SP or 4FT)-(CC)	32	1.260	8.0	0.315	2.8	0.1102	0.70	0.028	20
GMT-421AL-52/13-(SP or 4FT)-(CC)	52	2.047	13.0	0.512	3.0	0.1181	0.70	0.028	20

Color Code: 0=BLK, 1=BRN, 2=RED, 3=ORN, 4=YLW, 5=GRN, 6=BLU, 7=VIO, 8=GRY, 9=WHT, X=CLR P/N Example: GMT-421-3/4-0 = Black 3/4" Tubing 4:1 Shrink Tube