

B417

TRANSLUCENT VINYL TAPE

Description

B417 is an excellent material for wire and cable identification. This material has good clarity, conformability and is self-extinguishing. B417 has outstanding water and oil resistance.

B417 is recommended for application onto small diameter wires with low surface energy wire jacketing materials.

Material	Translucent vinyl
Finishing	Provided in a self-laminated format with a white printable zone and a translucent overlaminating area.
Adhesive	Permanent acrylic adhesive
Print technology	Thermal transfer

Physical data

Physical properties	Test methods	Average results
Thickness	ASTM D 1000 - Total thickness	0.0042 inch (0.107mm)
Adhesion to: - Stainless steel - Polypropylene	ASTM D 1000 20 minute dwell 24 hour dwell 20 minute dwell 24 hour dwell	48 oz/in (53 N/100 mm) 55 oz/in (60 N/100 mm) 54 oz/in (59 N/100 mm) 63 oz/in (69 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack (1 second dwell, 1 cm/sec separation)	25.0 oz (710 g)
Tensile Strength and Elongation	ASTM D 1000 -Machine	12 lbs/in (210 N/100 mm), 174%
Flammability	ASTM D 1000 Average Burn Time	ABT less than 10 seconds

Performance properties tested with white printable zone of B417 printed with R4300 black thermal transfer ribbon.

Samples wrapped around 0.080" OD TFE wire in a self-laminating format.

Performance properties	Test methods	Typical results White B7593 Halogen Free
High Service Temperature	30 days at 70°C (158°F)	No visual effect at 70°C (158°F) Moderate discoloration at 90°C (193°F) but still functional.
Low service Temperature	30 days at -70°C (-94°F)	No visual effect
Humidity Resistance	30 days at 37°C (100°F), 95% R.H.	No visual effect
UV Light Resistance	ASTM G155, cycle 1, Dry 30 days in Q-Sun Xenon Test Chamber	No visual effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon arc Weather-Ometer®	No visual effect

Chemical resistance

White printable zone of B417 was printed with R4300 black thermal transfer ribbon. Samples wrapped around 0.080" OD TFE wire in a self-laminating format. Except where noted, testing was conducted at room temperature after 24 hour dwell. Testing consisted of 5 cycles of a 10 minute immersion in the specified test fluid followed by a 30 minute recovery period.

Chemical reagent	Substrate / adhesive	Ribbon
Cleaners and solvents	No visible effect	No visible effect
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	Slight edge lift	No visible effect
Northwoods™ Buzz Saw Terpene Cleaner	No visible effect	No visible effect
Formula 409®	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect
Fuels, oils and lubricants		
Gasoline	Moderate unwrap	No visible effect
Brake Fluid	No visible effect	No visible effect
SAE 20/50 WT Oil at 70°C	No visible effect	No visible effect
Yellow 77® Wire Pulling Lubricant	No visible effect	No visible effect
Aerospace related fluids		
JP-8 Jet Fuel	Slight edge lift	No visible effect
MIL-H-5606 Oil	No visible effect	No visible effect

B427 is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane.

Storage

Shelf Life and Fitness for Use: Product testing, customer feedback, and history of similar products, support a customer performance expectation of one year from the date of receipt for this product as long as this product is stored in its original packaging in an environment below 80°F (27°C) and 60% RH. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use, in their actual applications.

Certificates

REACH

Please contact Altec for the latest REACH document available.

RoHS

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