

B427

Date
02/2018

TRANSLUCENT VINYL TAPE

Description

B427 is an excellent material for wire and cable identification. This material has good clarity, conformability and is self-extinguishing. B427 has outstanding water and oil resistance.

Material	Translucent vinyl
Finishing	Provided in a self-laminated format with a white printable zone and a translucent overlaminating area.
Color	White, yellow, green, red, silver and black
Adhesive	Permanent acrylic
Print technology	Thermal transfer

Physical data

Physical properties	Test methods	Average results
Thickness	ASTM D 1000 - Total thickness	0.0040 inch (0.102mm)
Adhesion to:	ASTM D 1000	
- Stainless steel	20 minute dwell 24 hour dwell	38 oz/in (42 N/100 mm) 49 oz/in (54 N/100 mm)
- Polypropylene	20 minute dwell 24 hour dwell	25 oz/in (28 N/100 mm) 33 oz/in (36 N/100 mm)
Tack	PSTC-7 (except ½" x 1" sample)	3.3 hours
Tensile Strength and Elongation	ASTM D 1000 -Machine -Cross	12 lbs/in (210 N/100 mm), 152% 11 lbs/in (193 N/100 mm), 195%
Flammability	ASTM D 1000 Average Burn Time	ABT less than 10 seconds

Performance properties	Test methods	Typical results White B7593 Halogen Free	Typical results Black B7593	Typical results B7593 Silver Halogen free
High Service Temperature	1000 hours at 100°C (212°F)	No visual effect	No visual effect	No visual effect
Low service Temperature	1000 hours at -40°C (-40°F)	No visual effect	No visual effect	No visual effect
Humidity Resistance	1000 hours at 37°C (100°F), 95% R.H.	No visual effect	No visual effect	No visual effect
UV Light Resistance	1000 hours in Q-Sun Xe-1 test chamber	No visual effect	No visual effect	No visual effect

Weatherability	1000 hours in QUV (ASTM G- 53)	No visual effect	No visual effect	No visual effect
Abrasion Resistance	Method 5306 US Federal test 191A CS 10 + 500 g/arm	Number of cycles until print is illegible 175 cycles	Number of cycles until print is illegible 75 cycles	Numbers of cycles until print is illegible 175 cycles

Performance properties tested with white printable zone of B427 printed with AWH-10 thermal transfer ribbon.
Samples wrapped around 0.080" OD TFE wire in a self-laminating format.

Performance properties	Test methods	Typical results
High service temperature	30 days at 158°F (70°C)	Slight discoloration. No visible effect at 140°F (60°C)
Low Service Temperature	30 days at -94°F (-70°C)	No visible effect
Humidity Resistance	30 days at 100°F (37°C), 95% R.H.	No visible effect
Weatherability	ASTM G155, Cycle 1 30 days in Xenon Arc Weatherometer	No visible effect

Chemical resistance

Chemical reagent	Substrate / adhesive	Ribbon
Cleaners and solvents		
Isopropyl Alcohol	No visible effect	No visible effect
Mineral Spirits	No visible effect	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 30 WT Oil at 70°C	No visible effect	No visible effect
Yellow 77® Wire Pulling Lubricant	No visible effect	No visible effect
Deionized Water	No visible effect	No visible effect
Aerospace related fluids		
JP-8 Jet Fuel	No visible effect	No visible effect
Skydrol 500B-4	Material destroyed	NA
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

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 .

Regulatory approvals

B427 is UL Recognized to UL969 Labeling and Marking Standard. See UL files MH17154 for specific details. Brady customers should specify at purchase if they require UL969 Recognized B427 labels.

B427 is UL Recognized to UL2238 Cable Assemblies and Fittings for Industrial Control and Signal Distribution Standard, Section 37.16 "Tests for permanence of wrap around cord or cable label". See UL files MH62024 or MH62052 for specific details.

Disclaimer:

Values shown in this document are averages only. For legal reasons, we emphasize that the information on this data is available as is and that Altec gives no guarantees with respect to the accuracy and completeness nor with respect to interpretations made on the basis of this information.