

PI376

UL94 VTM 0 MATTE WHITE POLYIMIDE LABEL



Description

Identification label for mobile phone battery pack, optical trans- receiver devices, optical fiber amplifier and wrap -around conformity.

Material	Polyimide
Finishing	Matte
Color	White
Adhesive	Permanent acrylic

Regulatory

UL: PI376 is a UL Recognized Component to UL969 Labeling and Marking Standard when printed with the R6200 and the R7961 ribbons. See UL files MH17154, MH25991 and MH16386 for specific details. UL information can be accessed on-line at UL.com in the UL Product iQ area.

PI376 is QMFZ2 recognized and VTM- 0 rated as per UL94 standard. Refer to File# E316839 under Certifications at www.ul.com

Special features

PI376 is halogen-free in accordance to definition in IEC61249- 2- 21 and IPC- 4101B, tested using IPC-TM-650.

Details

Physical properties	Test method	Typical results	
Thickness	ASTM D1000		
	- Substrate	0.002 inch (0.046 mm)	
	- Adhesive	0.001 inch (0.022 mm)	
	- Total (excluding liner)	0.003 inch (0.068 mm)	
Peel adhesion to:	ASTM D1000		
- Stainless steel	20 minute dwell	29 oz/inch (32 N/100 mm)	
	72 hour dwell	38 oz/inch (41 N/100 mm)	
- ABS	20 minute dwell	28 oz/inch (31 N/100 mm)	
	72 hour dwell	33 oz/inch (37 N/100 mm)	
Tack	ASTM D 2979	30 oz (859 g)	
	Polyken™ Probe Tack		
	0.5 second dwell		

Performance properties exhibited by PI376 in the following were based on samples printed with the R6200 ribbon. Printed samples were laminated to aluminum panels and allowed to dwell 24 hours before exposure to the indicated environment.

Properties	Test method	Typical results
Abrasion	CS-10, 25 cycles load 250g	No visible effect
High temperature resistance	100°C for 1000 hours in air oven	Slight yellowing of topcoat. Label remained functional, print is legible

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Low temperature resistance	-40°C for 1000 hours in freezer -70°C for 1000 hours in freezer	No visible effect No visible effect
High humidity resistance	37°C / 95% RH for 1000 hours	No visible effect
Thermal shock resistance	-40°C to 85°C for 10 cycles	No visible effect
Weathering resistance	ASTM G155 1000 hours exposure in Xenon Arc Weather- Ometer®	Slight yellowing of topcoat. Label remained functional, print is legible

Test samples were printed with the R6200 ribbon. Printed samples were laminated to aluminum panels and allowed to dwell 24 hours prior to testing. Testing was conducted at room temperature and consisted of 15 minute immersion in specified test fluid. After immersion, the samples were removed from the test fluid and the printed image was rubbed 10 times with a cotton swab saturated with the test fluid. A rating scale of 1 -5 is used in the table below to show the print quality of the samples tested upon exposure to different chemicals.

Chemical reagent	Subjective observation of visual change			
	Effects to material	Effects to printed image		
		R6200		
		Without rub	With rub	
IPA	No visible effect	1	1	
Mineral spirit	No visible effect	1	1	
10% sulphuric acid	No visible effect	1	1	

Rating scale: 1 = No visible effect / 2 = Slight print removal / 3 = Moderate print removal / 4 = Severe print removal / 5 = Complete print removal

Shelf life

Shelf life is two years 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. It remains the responsibility of the user to assess the risk of using this product. We encourage customers to develop testing protocols that will qualify a product's fitness for use in their actual application.

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.

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