

A376

UL94 VTM 0 MATTE WHITE POLYIMIDE LABEL

Description

A376 is a 1 mil ($25 \mu m$) polyimide film with a high-temperature, permanent, pressure sensitive acrylic adhesive and a high opacity, semi-gloss white topcoat specifically designed to be **flame retardant** to the UL94 VTM-0 standard.

Material	Polyimide
Finishing	Matte
Color	White
Adhesive	Permanent acrylic
Layers	



- Semi-gloss white print surface
- Polyimide film
- Acrylic PSA
- Glassine liner

Features

- Designed to prevent the propagation of fire
- Meets the UL94 VTM-0 standard.
- Halogen-free
- · Can be printed with thermal transfer systems
- When printed with a recommended thermal transfer ribbon, the label is resistant to chemical exposure such as isopropanol, terpene, and saponifiers.
- The image is smear-resistant, even when the directly exposed to rubbing or incidental contact.
- · Dimensionally stable at high temperatures

Technical data

Properties	Test method	Average results (Imperial Units)	Average results (SI Units)	
Thickness	ASTM D-1000			
Face		1.5 mil	38 μm	
Adhesive		1.1 mil	28 μm	
Total		2.6 mil	66 µm	
Adhesion				
Stainless steel	20 minute dwell	≥ 27 oz/in	≥ 29 N/100 mm	
	24 hour dwell	≥ 32 oz/in	≥ 35 N/100 mm	
Tack		≥ 1000 g/in	≥ 39 g/mm	
Opacity		≥ 85%		
Color		White		
Gloss	BYK Gardner	75GU @ 140 °F (60 °C)		
Flammability	UL94 Standard			
	VTM-0 rating	Pass		
	V0 rating	Pass (Aluminium substrate)		
Federal aviation regulation	25.853 & 25.855	Pass		
Smoke	BSS7238	Pass		
Toxicity	BSS7239	Pass		
Automotive Interiors	FMVSS302	Pass		
Weatherometer Testing	ASTM G154	No Visible Effect		



Temperature Rating	Long term	100 hrs @ 257 °F, 24 hrs @ -94 °F	100 hrs @ 125 °C, 24 hrs @ -70 °C		
	Operating	5 mins @ -67 °F to 500 °F	5 mins @ -55 °C to 260 °C		
	Short term	90 sec @ 572 °F	90 sec @ 300 °C		
Shelf life	1 year below 80 °F	1 year below 80 °F (27 °C) and 60% R.H.			

Durability testing: heat / chemical

Test fluids	PCS ¹	Read Rate ²
Control: 158 °F (70 °C), 5 min.	99%	100%
Re-entry KNI 2000 Terpene 104 °F - 113 °F (40 °C - 45 °C), 5 min.	98%	100%
Isopropanol 99%, 158 °F (70 °C), 5 min.	99%	100%

¹ PCS Print Contrast Signal. PCS determined with Quick Check 650, 0.005" aperture, 660 nm wave lengths. Quick Check 650 manufactured by: Photographic Sciences Corp. 2 Read rate determined using PSC 850 laser scanner.

Certificates

REACH

Please contact Altec for the latest REACH document available.

RoHS

Please contact Altec for the latest RoHS document available.

Special considerations

- The surface on which the label is applied should be clean, dry and free of any contamination, such as dust, oil or rust. Isopropyl alcohol is recommended to clean the surface.
- . Use firm pressure when applying label to increase the physical contact of the adhesive with the surface.
- Pressure sensitive adhesives will provide stronger bonds to warm surfaces by increasing adhesive flow and peel strength.
- · Preheating the labeled product can enhance print permanence for cases of extreme solvent and/or abrasion exposure.
- Topcoat and print should not be contacted while exposed to elevated temperature.

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.