

B425

FLAG LABEL



Description

Thermal transfer printable polypropylene label stock

Print technology Thermal transfer

Material Polypropylene

Color Matt white

Adhesive Acrylic

Physical data

Physical properties	Test methods	Average results
Thickness	ASTM D 1000 - Substrate - Adhesive - Total	0.0036 inch (0.0889 mm) 0.0010 inch (0.0254 mm) 0.0046 inch (0.1143 mm)
Adhesion to: - Stainless steel	ASTM D 1000 20 minute dwell 24 hour dwell	60 oz/inch (66 N/100 mm) 61 oz/inch (67 N/100 mm)
- Textured ABS	20 minute dwell 24 hour dwell	24 oz/inch (26 N/100 mm) 27 oz/inch (30 N/100 mm)
- Polypropylene	20 minute dwell 24 hour dwell	53 oz/inch (58 N/100 mm) 57 oz/inch (62 N/100 mm)
Tack	ASTM D 2979 Polyken™ Probe Tack (0.5 second dwell)	36.6 oz (1040 g)
Tensile strength and elongation	ASTM D 1000 - Machine	23 lbs/inch (403 N/100 mm), 106%

Performance properties	Test methods	Typical results
Short term high service temperature	5 minutes at various temperatures	No visible effect to label at 266°F (130°C), very slight label shrinkage at 293°F (145°C) but still functional, slight discoloration and severe curl at 320°F (160°C).
Long Term High Service Temperature	30 days at various temperatures	No visible effect to label at 176°F (80°C), slight label discoloration at 212°F (100°C) but label still functional, severe discoloration at 248°F (120°C).
Low Service Temperature	30 days at -40°F (-40°C) 30 days at -94°F (-70°C)	No visible effect
Humidity resistance	30 days at 100°F (37°C)/ and 95% Relative Humidity	No visible effect

Weatherability	ASTM G488, Cycle 1 30 days in Xenon Arc Weatherometer	Topcoat becomes chalky
Abrasion resistance	Taber Abraser, CS- 10 grinding wheels, 500 g/arm (Fed. Std. 191A, Method 5306)	Appearance to print after 100 cycles: moderate to severe print removal; print barely legible.

Chemical resistance tested on B425. Test was conducted at room temperature except where noted. Testing consisted of 30 minute immersion in the specified test fluid. The samples were removed and rubbed 10 times with a cotton swab saturated with the test fluid. The rating scale below shows the effect to the quality of the print for each sample.

Subjective observation of visual change

Chemical reagent	Effect to label stock / adhesive	Effects to printed image
Methyl Ethyl ketone	Moderate ooze	1
Xylene	Severe ooze	2
Toluene	No visible effect	1-2
Acetone	No visible effect	1
Mineral spirits	Slight ooze	1
JP-8 Jet fuel	Moderate ooze	1
Brake fluid	No visible effect	1
SAE 20 wt Oil RT	No visible effect	1
SAE 20 wt Oil @ 70C	No visible effect	3
ASTM #3 Oil	No visible effect	1
Isopropyl alcohol	Slight ooze	1
Mil 5606 Oil	No visible effect	1
Skydrol® 500B	No visible effect	1
Formula 409®	No visible effect	1
DI Water	No visible effect	1
3% Alconox®	No visible effect	1
Northwoods™ Buzz Saw Degreaser	No visible effect	5
Super Agitene®	No visible effect	1
10% Sulfuric acid solution	Slight ooze	1
10% Sodium hydroxide solution	No visible effect	1

Rating scale

- 1 = No visible effect
- 2 = Slight smear or print removal; detectable but minimal smear
- 3 = Moderate smear or print removal (print still legible)
- 4 = Severe smear or print removal
- 5 = Complete print and/or topcoat 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.

Compliances



B425 is a UL Recognized Component to UL969 Labeling and Marking Standard. See UL file MH17154 for specific details. UL can be accessed on line at UL.com in the UL Product iQ area.



B425 is CSA Accepted to C22.2 No.0.15- 95 Adhesive Labels Standards. B425 is approved to Type A. See CSA file 041833 for specific details. CSA information can be accessed online at directories.csa-international.org

DNI VDE

B425 meets the requirements of a halogen- free material per DIN VDE 0472 part 815. (Statement based on the review of product construction and confirmatory halogen content test run at an independent test laboratory).

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.