



ULTRA-TEMP POLYIMIDE LABELS
TECHNICAL DATA SHEET
BOOKLET



UltraTemp™ Series
High Heat Labels

B-717 Gloss 2-Mil White ESD Polyimide Labels

White polyimide film (2 mil) with gloss finish and ultra-durable static dissipative permanent acrylic adhesive. Excellent resistance to wave solder environments for PCB and electronic component preprocess labeling.

APPLICATIONS

- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

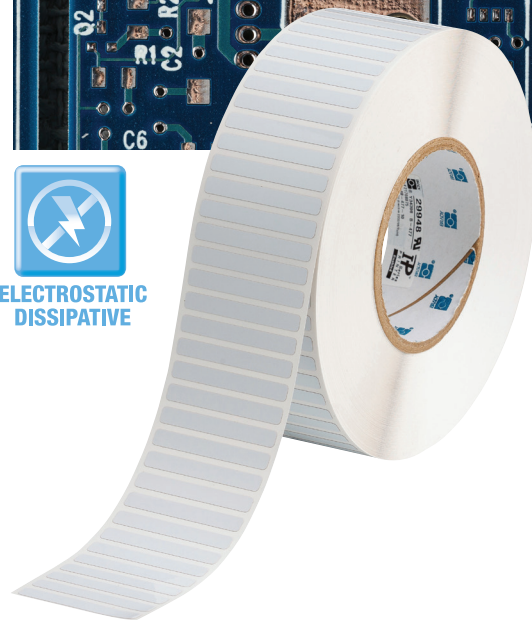
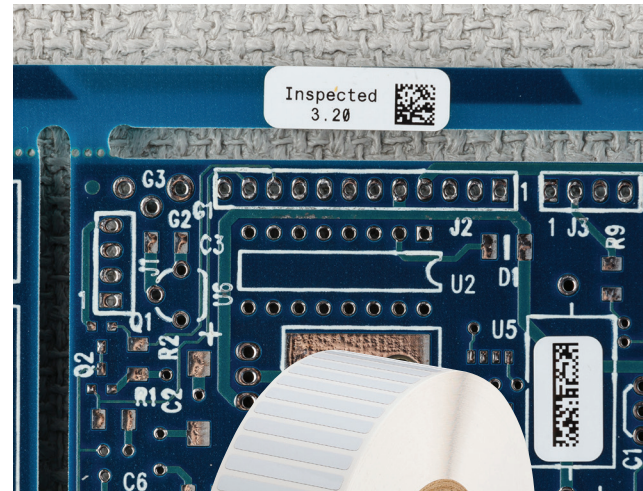
- Adhesive resistivity in the recommended range set by ANSI/ESD S541-2008
- RoHS Directive 2011/65/EU
- MIL-STD-202G
- UL 969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- Ultra-durable permanent adhesive
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 12,000 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600

RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free



ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness		
	ASTM D1000	
	Substrate	0.0025 inch (0.063 mm)
	Adhesive	0.0017 inch (0.043 mm)
	Total	0.0042 inch (0.106 mm)
Adhesion to:		
	ASTM D1000	
	Stainless Steel	20 minute dwell 40 oz/in (44 N/100 mm)
		24 hour dwell 55 oz/in (61 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 626°F (330°C) but still functional, at 662°F (350°C) label still functional but moderately discolored and adhesive discolored at label edge; print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 212°F (100°C), label discolors slightly at 248°F (120°C), moderately at 293°F (145°C). Label remains functional. Print is still legible.

TESTS

Test samples were printed with the Series R6000 Halogen Free thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples were exposed to the indicated environments. Test samples were baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		WITHOUT RUB	WITH RUB
Kyzen Corp., 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	4
Kyzen Corp., 17% Aquanox® A4520 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp., 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp., 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	1
Zestron, 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	5
Isopropyl Alcohol 99% at 180°F (82°C)	No visible effect	1	2
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

Specifications subject to change without notice.

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least 2 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. We are confident that our product will perform well beyond this time frame 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 products fitness for use in their actual application.

B-718 Gloss Low-Profile White ESD Polyimide Labels

Low-profile (1 mil) white polyimide film with a gloss finish and ultra-durable static dissipative permanent acrylic adhesive. Low-profile film allows for easier use in processes needing thin and/or lighter labels that require tighter tolerances and clearances.

APPLICATIONS

- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

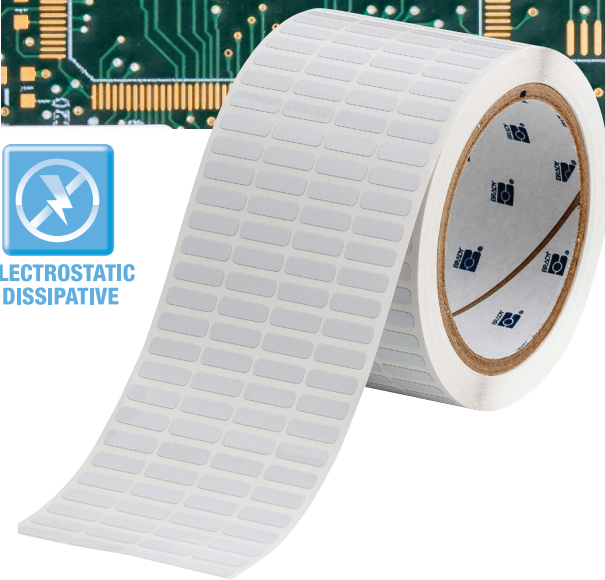
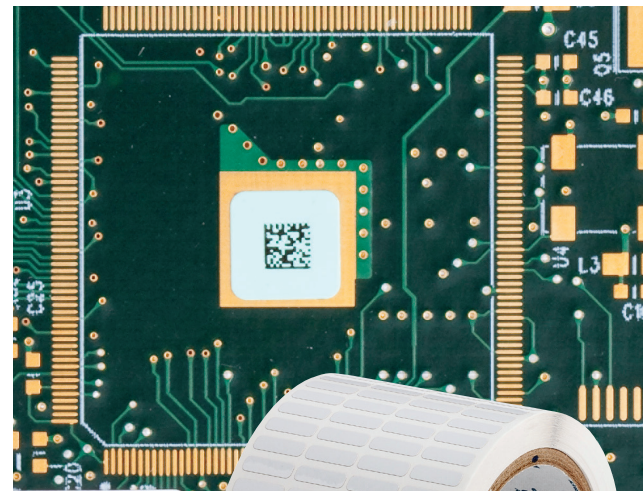
- Adhesive resistivity in the recommended range set by ANSI/ESD S541-2008
- RoHS Directive 2011/65/EU
- MIL-STD-202G
- UL 969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- Ultra-durable permanent adhesive
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 9,800 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600

RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free



ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness		
	ASTM D1000	
	Substrate	0.0016 inch (0.041mm)
	Adhesive	0.0017 inch (0.043 mm)
	Total	0.0033 inch (0.084 mm)
Adhesion to:		
	ASTM D1000	
	Stainless Steel	20 minute dwell 40 oz/in (44 N/100 mm)
		24 hour dwell 47 oz/in (51 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 626°F (330°C) but still functional, at 662°F (350°C) label still functional but moderately discolored and adhesive discolored at label edge; print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 212°F (100°C), label discolors slightly at 248°F (120°C), moderately at 293°F (145°C). Label remains functional. Print is still legible.

TESTS

Test samples were printed with the Series R6000 Halogen Free thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples were exposed to the indicated environments. Test samples were baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		WITHOUT RUB	WITH RUB
Kyzen Corp., 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	4
Kyzen Corp., 17% Aquanox® A4520 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp., 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp., 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	1
Zestron, 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	5
Isopropyl Alcohol 99% at 180°F (82°C)	No visible effect	1	2
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

Specifications subject to change without notice.

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least 2 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. We are confident that our product will perform well beyond this time frame 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 products fitness for use in their actual application.

B-719 Matte Low-Profile White ESD Polyimide Labels

Low-profile (1 mil) white polyimide film with a matte finish and ultra-durable static dissipative permanent acrylic adhesive. Low-profile film allows for easier use in processes needing thin and/or lighter labels that require tighter tolerances and clearances. Matte topcoat prevents solder balls from sticking after molten wave solder exposure.

APPLICATIONS

- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

- Adhesive resistivity in the recommended range set by ANSI/ESD S541-2008
- RoHS Directive 2011/65/EU
- MIL-STD-202G
- UL 969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- Ultra-durable permanent adhesive
- B-719 matte topcoat is designed to resist solder balls from sticking to the label after exposure to molten wave solder
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 8,500 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600



RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free. R4700 series if not subjecting the label to reflow or a pre-bake prior to going through an inline or batch wash system.

ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D1000	
	Substrate	0.0018 inch (0.046 mm)
	Adhesive	0.0015 inch (0.038 mm)
	Total	0.0033 inch (0.084 mm)
Adhesion to:	ASTM D1000	
	Stainless Steel	20 minute dwell 31 oz/in (34 N/100 mm)
		24 hour dwell 38 oz/in (42 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 608°F (320°C) but still functional, at 662°F (350°C) label still functional but moderately discolored and adhesive discolored at label edge; print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 212°F (100°C), label discolors slightly at 248°F (120°C), moderately at 293°F (145°C). Label remains functional. Print is still legible.

TESTS

Test samples were printed with the Series R6000 Halogen Free thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples were exposed to the indicated environments. Test samples were baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		WITHOUT RUB	WITH RUB
Kyzen Corp., 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp., 17% Aquanox® A4520 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp., 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp., 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	3
Zestron, 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	4
Zestron, 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	4
Zestron, 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	4
Zestron, 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	4
Isopropyl Alcohol 99% at 180°F (82°C)	No visible effect	1	1
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least 2 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. We are confident that our product will perform well beyond this time frame 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 products fitness for use in their actual application.

B-724 Matte 2-Mil Amber Thermal Transfer Polyimide Labels

Amber high-temperature polyimide material with an ultra-durable permanent adhesive designed for extreme wash processes and cleaning chemicals. When used with Brady R4300 series ribbons, fulfills requirements for MILSTD-202G method 215K and SAE AS81531 marking of electrical insulating material.

APPLICATIONS

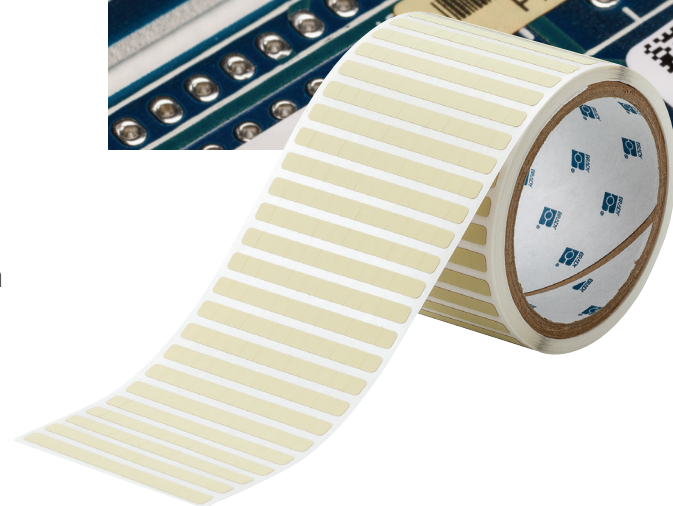
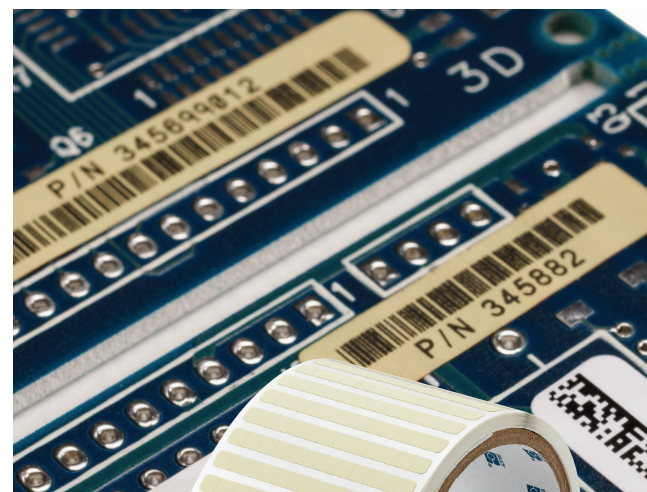
- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

- RoHS Directive 2011/65/EU
- MIL-STD-202G
- SAE AS81531

KEY FEATURES

- Ultra-durable permanent adhesive
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 10,000 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600



RECOMMENDED RIBBONS

- Brady Series R4300

ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness		
	ASTM D1000	
	Substrate	0.0028 inch (0.072 mm)
	Adhesive	0.0016 inch (0.039 mm)
	Total	0.0044 inch (0.111 mm)
Adhesion to:		
	ASTM D1000	
Stainless Steel	20 minute dwell	45 oz/inch (49 N/100 mm)
	24 hour dwell	47 oz/inch (51 N/100 mm)
Epoxy PC Board	20 minute dwell	33 oz/inch (36 N/100 mm)
	24 hour dwell	48 oz/inch (53 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 626°F (330°C)	No visible effect to label at 626°F (330°C), label discolors slightly at 644°F (340°C), but still functional, at 662°F (350°C) label still functional but slightly discolored and adhesive discolored at label edge.
Long Term High Service Temperature	1000 hours at 356°F (180°C)	No visible effect to label at 180°C, at (200°C) label still functional but slightly discolored and adhesive brown at edge.

TESTS

Samples printed with Series R4300 thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples exposed to indicated environments. Test samples baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		R4300	
		WITHOUT RUB	WITH RUB
Kyzen Corp. 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	1
Kyzen Corp. 17% Aquanox® A4620 at 140°F (60°C)	No visible effect	1	2
Kyzen Corp. 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp. 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	1
Zestron 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	2
Zestron 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	2
Zestron 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	2
Zestron 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	2
99% Isopropyl Alcohol at 180°F (82°C)	No visible effect	1	1
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

B-727 Gloss 2-Mil White Thermal Transfer Polyimide Material

High-temperature polyimide material (2 mil) featuring dibutyl and dioctyl tin free top coat with a gloss finish to withstand wave solder environments for printed circuit board and electronic component pre-process labeling. Ultra-durable adhesive designed for extreme wash process and cleaning chemicals. Also ideal for use in auto apply equipment.

APPLICATIONS

- Pre-process traceability identification
- Ideal for auto-apply equipment
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

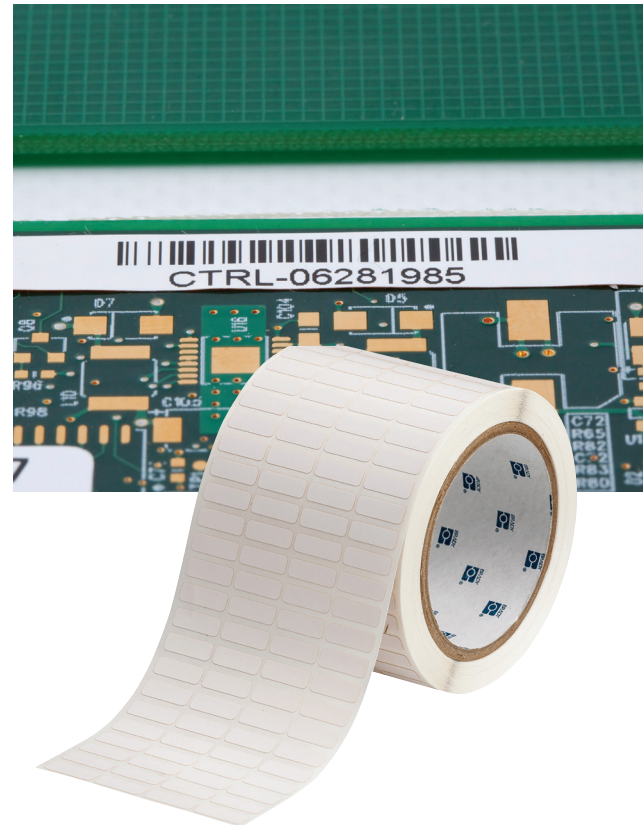
- RoHS Directive 2011/65/EU
- UL969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- B-727 is dibutyl and dioctyl tin free
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 10,000 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600

RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free



ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness		
	ASTM D1000	
	Substrate (topcoat & film)	0.0027 inch (0.068 mm)
	Adhesive	0.0017 inch (0.043 mm)
	Total (excluding liner)	0.0044 inch (0.111 mm)
Adhesion to:		
	ASTM D1000	
Stainless Steel	20 minute dwell	46 oz/in (50 N/100 mm)
	24 hour dwell	57 oz/in (62 N/100 mm)
Epoxy PC Board	20 minute dwell	36 oz/in (39 N/100 mm)
	24 hour dwell	49 oz/in (54 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 626°F (330°C) but is still functional, label still functional but moderately discolored at 662°F (350°C); print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 212°F (100°C), label discolors slightly at 248°F (120°C), moderately at 293°F (145°C). Label remains functional. Print is legible.

TESTS

Samples printed with Series R6000 Halogen Free thermal transfer ribbon. Samples laminated to an epoxy PC board. Test samples were exposed to the indicated environments. Test samples were baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes. Samples were rubbed 10 times with a cotton swab saturated with the test fluid.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		WITHOUT RUB	WITH RUB
Kyzen Corp. 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	4
Kyzen Corp. 17% Aquanox® A4520 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp. 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp. 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	1
Zestron, 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	5
Zestron, 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	5
Isopropyl Alcohol 99% at 180°F (82°C)	No visible effect	1	2
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

B-728 Matte 2-Mil White Thermal Transfer Polyimide Labels

High-temperature polyimide material (2 mil) with ultra-durable adhesive for extreme wash processes and cleaning chemicals. Special matte topcoat prevents solder balls from sticking to the label after wave soldering. Ideal for use in auto apply equipment.

APPLICATIONS

- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

- RoHS Directive 2011/65/EU
- MIL-STD-202G
- UL969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- Ultra-durable permanent adhesive
- B-728 matte topcoat is designed to resist solder balls from sticking to the label after exposure to molten wave solder
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 10,700 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600



RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free. R4700 series if not subjecting the label to reflow or a pre-bake prior to going through an inline or batch wash system.

Specifications subject to change without notice.

ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness		
	ASTM D1000	
	Substrate	0.0027 inch (0.068 mm)
	Adhesive	0.0017 inch (0.043 mm)
	Total	0.0044 inch (0.111 mm)
Adhesion to:		
	ASTM D1000	
Stainless Steel	20 minute dwell	39 oz/in (43 N/100 mm)
	24 hour dwell	49 oz/in (53 N/100 mm)
Epoxy PC Board	20 minute dwell	32 oz/in (35 N/100 mm)
	24 hour dwell	39 oz/in (43 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 608°F (320°C), but still functional, at 662°F (350°C) label still functional but moderately discolored and adhesive discolored at label edge; print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 100°C, label discolors slightly at 120°C, moderately at 145°C. Label remains functional.

TESTS

Test samples were printed with Series R6000 Halogen Free thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples were exposed to indicated environments. Test samples were baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		R6000 HALOGEN FREE	
		WITHOUT RUB	WITH RUB
Kyzen Corp. 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp. 17% Aquanox® A4620 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp. 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp. 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	3
Zestron 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	4
99% Isopropyl Alcohol at 180°F (82°C)	No visible effect	1	1
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

Product testing, customer feedback and history of similar products, support a customer performance expectation of at least 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. We are confident that our product will perform well beyond this time frame 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 application.

B-729 Matte Low-Profile White Thermal Transfer Polyimide Labels

High-temperature, low-profile (1 mil) polyimide material with ultra-durable adhesive for extreme wash processes and cleaning chemicals. Low profile is ideal for processes requiring thin or lighter weight materials. Special matte topcoat prevents solder balls from sticking to the label after wave soldering.

APPLICATIONS

- Pre-process traceability identification
- Top or bottom board placement
- Works with both surface-mount and through-hole assembly processes

REGULATORY APPROVALS

- RoHS Directive 2011/65/EU
- MIL-STD-202G
- UL969
- ASTM E595 Out-Gassing Requirements

KEY FEATURES

- Ultra-durable permanent adhesive
- B-729 matte topcoat is designed to resist solder balls from sticking to the label after exposure to molten wave solder
- Designed to withstand multiple cycles of harsh condition wash cycles (inline and batch)
- Peak temperatures up to 300°C
- Average dielectric strength of 8,500 volts
- Compatible for use with ZESTRON – ATRON® AC 207, ATRON® AC 205, VIGON® A 201, VIGON® N 600



RECOMMENDED RIBBONS

- Brady Series R6000 Halogen Free. R4700 series if not subjecting the label to reflow or a pre-bake prior to going through an inline or batch wash system.

Specifications subject to change without notice.

ADHESIVE PERFORMANCE

PHYSICAL PROPERTIES	TEST METHODS	AVERAGE RESULTS
Thickness	ASTM D1000	
	Substrate	0.0017 inch (0.043 mm)
	Adhesive	0.0017 inch (0.043 mm)
	Total	0.0034 inch (0.086 mm)
Adhesion to:	ASTM D1000	
Stainless Steel	20 minute dwell	34 oz/in (37 N/100 mm)
	24 hour dwell	46 oz/in (50 N/100 mm)
Epoxy PC Board	20 minute dwell	30 oz/in (33 N/100 mm)
	24 hour dwell	37 oz/in (40 N/100 mm)

TEMPERATURE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHODS	AVERAGE RESULTS
Short Term High Service Temperature	80 seconds at 572°F (300°C)	No visible effect to label at 572°F (300°C), label discolors slightly at 608°F (320°C), but still functional, at 662°F (350°C) label still functional but moderately discolored and adhesive discolored at label edge; print is still legible.
Long Term High Service Temperature	1000 hours at 212°F (100°C)	No visible effect to label at 100°C, label discolors slightly at 120°C, moderately at 145°C. Label remains functional.

TESTS

Samples printed with Series R6000 Halogen Free thermal transfer ribbon. Labels were adhered to an epoxy PC board. Test samples were exposed to indicated environments. Test samples baked 4 minutes at 160°C before testing. All test samples were immersed in the test fluids for 10 minutes prior to rub with a cotton swab ten times.

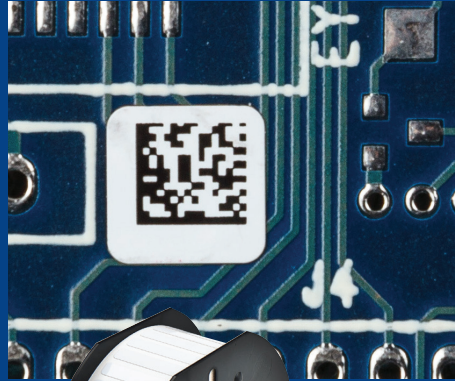
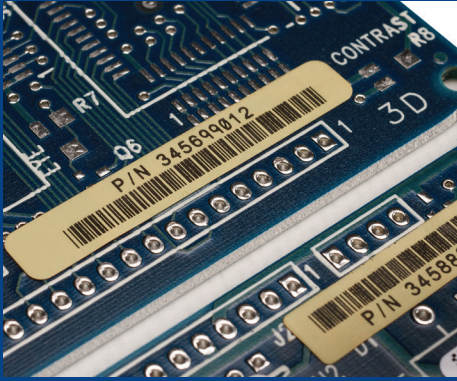
CHEMICAL REAGENT	EFFECT TO LABEL	SUBJECTIVE OBSERVATION TO VISUAL CHANGE	
		WITHOUT RUB	WITH RUB
Kyzen Corp. 15% Aquanox® A4625 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp. 17% Aquanox® A4620 at 140°F (60°C)	No visible effect	1	3
Kyzen Corp. 10% Aquanox® A4638 at 150°F (65°C)	No visible effect	1	1
Kyzen Corp. 20% Aquanox® A4703 at 145°F (63°C)	No visible effect	1	3
Zestron 15% Atron® AC205 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Atron® AC207 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Vigon® N600 at 150°F (65°C)	No visible effect	1	4
Zestron 15% Vigon® A201 at 150°F (65°C)	No visible effect	1	4
99% Isopropyl Alcohol at 180°F (82°C)	No visible effect	1	1
Deionized water at 212°F (100°C)	No visible effect	1	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 (print illegible or just barely legible)
- 5 = complete print removal

To learn more, visit BradyID.com/polyimide or call 888-272-3946

Product testing, customer feedback and history of similar products support a customer performance expectation of at least 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. We are confident that our product will perform well beyond this time frame 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.



**For more information
on Brady materials, visit:
BradyID.com/polyimide**

USA
Customer Service: 1-888-272-3946
Inside Sales: 1-888-311-0775
BradyID.com

Canada
Customer Service: 1-800-263-6179
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Mexico
Customer Service: 1-800-262-7777
Inside Sales: 1-800-262-7777 ext 177
BradyLatinAmerica.com