









































Type	Max. Service Temp. °F (°C)	Color	Finish	Use	Special Properties
ACETATE					
B-358	176 (80) 30 days	Clear	Gloss	Package seals and tamper-evident labeling	Flexible; tamper-resistant
B-359	176 (80) 30 days	White	Gloss	Package seals and tamper-evident labeling	Flexible; tamper-resistant
GLASS CLOTH					
B-520	932 (500) 10 min.	White	Matte	High temperature work in process ID	Label is pressure sensitive at room temperature and becomes permanently affixed at temperatures above 400°C
NYLON CLOTH					
B-499	194 (90) 30 days	White	Matte	Wire and electronic component marking	Permanent adhesive 
PAPER					
B-353	194 (90) 30 days	White	Matte	Package seals and tamper-evident labeling	Low internal strength; tamper-resistant
B-402	158 (70) 30 days	White	Matte	Bar code and general labeling	Aggressive adhesive for bonding to corrugated, films, plastic and steel
B-408	70 (21) 30 days	White	Matte	Bar code and general labeling	Repositionable adhesive
B-424	158 (70) 30 days	White	Matte	Bar code and general labeling	Good contrast and smear resistance
POLYESTER					
B-422	248 (120) 30 days	White	Gloss	Electronic PCB and component; bar code label and rating plates	2 mil adhesive recommended for application on textured surfaces  
B-423	248 (120) 30 days	White	Gloss	Electronic PCB and component; bar code label and rating plates	  
B-428	176 (80) 30 days	Silver	Matte	Rating plates; electronic component marking	  
B-430	212 (100) 30 days	Clear	Gloss	General labeling rating/name plates	Translucent  
B-432	212 (100) 30 days	Clear	Gloss	General labeling rating/name plates	Translucent; 2 mil adhesive recommended for application on textured surfaces  
B-433	248 (120) 30 days	White	Gloss	Electronic component and PCB marking; bar code label and general-purpose ID	Removable adhesive 
B-434	194 (90) 30 days	Silver	Gloss	Rating plates and general-purpose labeling	2 mil adhesive recommended for application on textured surfaces  
B-435	212 (100) 30 days	Silver	Gloss	Rating plates and general-purpose labeling	Designed to withstand solvents while maintaining excellent image quality   
B-438	104 (40) 30 days	Silver	Matte	Rating plates and tamper-evident labeling	Metallized; checkerboard footprints when removed
B-459	212 (100) 30 days	White	Matte	Electronic PCB and component; bar code label and rating plates	 
B-461	230 (110) 30 days	Clear	Matte	Laboratory applications such as liquid nitrogen, autoclave, freezer and hot water bath	Can be offered in a self-laminating format with a white printable zone
B-464	176 (80) 30 days	Silver	Gloss	Long distance bar code scanning	Retro-reflective surface
B-473	248 (120) 30 days	White	Gloss	Electronic PCB and component; bar code labeling and rating plates	Static dissipative adhesive and liner   
B-483	248 (120) 30 days	White	Gloss	General purpose labeling	Highest adhesion product for thermal transfer printing, designed for powder coated surfaces  
B-484	248 (120) 30 days	White	Gloss	Textured/rough surfaces, angled/curved surfaces	Low profile construction  
B-486	248 (120) 30 days	Silver	Matte	Rating plates; electronic component marking	Highest adhesion product for thermal transfer printing, designed for powder coated surfaces  
B-488	248 (120) 30 days	White	Matte	Electronic PCB and component; bar code label and rating plates	High performance matte white   
B-489	212 (100) 30 days	White	Matte	General purpose labeling	Highest adhesion product for thermal transfer printing, designed for powder coated surfaces
B-490	—	White	Matte	Thermal transfer printable label stock capable of adhering to cold/frozen surfaces	This material offers the unique ability to apply identification to a frost covered/cryogenically frozen surfaces
B-7546	175 (80) 30 days	White	Gloss	Rating plates and tamper-evident labeling	"Void" footprint when removed  
B-7566	175 (80) 30 days	Clear	Gloss	Rating plates and tamper-evident labeling	"Void" footprint when removed
B-7576	212 (100) 30 days	Silver	Matte	Rating plates and tamper-evident labeling	Metallized; leaves "Void" footprint when removed 
B-8423	248 (120) 30 days	White	Satin	General purpose labeling	 
POLYESTER/PAPER					
B-350	194 (90) 30 days	White	Gloss	Control of invalid warranty claims	Provides evidence of exposure to water 
B-354	194 (90) 30 days	White	Gloss	Control of invalid warranty claims	Provides evidence of exposure to water 
POLYETHYLENE NAPHTHALATE (PEN)					
B-495	464 (240) 5 min.	White	Gloss	Top- or bottom-side board application for SMT, or Topside or Through hole	Good contrast and smear resistance
POLYIMIDE					
B-426	662 (350) 80 sec.	Amber	Matte	Top- or bottom-side board application for SMT or Through hole	Withstands extremely high temperatures
B-436	662 (350) 80 sec.	Amber	Matte	Printed circuit board and component marking	Label will remove cleanly after high-temperature exposure
B-457	662 (350) 80 sec.	White	Gloss	Top- or bottom-side board application for SMT or Through hole	Good contrast and smear resistance 

 These materials have static dissipative adhesives.

 *These materials are UL recognized.













 *These materials are CSA approved.




 *These materials are AGA approved.

*Refer to the full page charts on pages 280-281 for more information and complete listing of parts.

**Currently in testing.







Thermal Transfer Materials Chart

Type	Max. Service Temp. °F (°C)	Color	Finish	Use	Special Properties
POLYIMIDE (continued)					
B-477	662 (350) 80 sec.	White	Gloss	Top- or bottom-side board application for SMT or Through hole	Static dissipative adhesive and liner 
B-478	662 (350) 80 sec.	White	Gloss	Top- or bottom-side board application for SMT or Through hole	Static dissipative adhesive and liner, low profile construction, good contrast and smear resistance 
B-479	662 (350) 80 sec.	White	Matte	Top- or bottom-side board application for SMT or Through hole	Static dissipative adhesive and liner, low profile construction, excellent resistance to solder balling, matte finish 
B-487	662 (350) 80 sec.	White	Matte	Top- or bottom-side board application for SMT or Through hole	Excellent resistance to solder balling, matte finish 
B-497	662 (350) 80 sec.	White	Matte	Top- or bottom-side board application for SMT or Through hole	Low-profile construction, excellent resistance to solder balling, matte finish 
POLYOLEFIN					
B-407	194 (90) 30 days	Clear	Matte	General purpose labeling	Clear Polyolefin 
B-449	194 (90) 30 days	White	Matte	Temporary labeling application	Removable; good solvent resistance and print performance 
POLYPROPYLENE					
B-8425	194 (90) 30 days	White	Gloss	Rating plates and general purpose labeling	Excellent abrasion and smudge resistance 
SLEEVE MATERIALS					
B-341 Polyolefin	275 (135) 30 days	White	Matte	Wire marking	2-to-1 shrink ratio, self-extinguishing; meets MIL-1-23053/5 class 1; MIL-M-81531; MIL-STD-202F; method 215 and UL 224 
B-342 Polyolefin	275 (135) 30 days	White/Yellow	Matte	Wire marking	3-to-1 shrink ratio, self-extinguishing; meets MIL-1-23053/5 class 1; MIL-M-81531; MIL-STD-202F; method 215 and UL 224 
TAG MATERIAL					
B-109	176 (80) 30 days	White	Matte	Multi-purpose identification tag, where durability and computer printability are required	Cross-laminated polyethylene provides extreme tear resistance and excellent cold-weather performance
B-411	122 (50) 30 days	White	Matte	Tag material designed for general purpose marking	Spunbound polyolefin provides resistance to water and chemicals
B-412	212 (100) 30 days	White	Matte	Wire, cable and product inventory identification	Polypropylene tag designed for outdoor and harsh environmental applications or where tensile strength is needed
TEDLAR®					
B-437	275 (135) 30 days	White/Yellow	Matte	Aerospace and military cable marking	Self-extinguishing; available in white or yellow
VINYL					
B-351	212 (100) 30 days	White	Matte	Tamper-resistant labels	Flexible; solvent resistant; tamper-resistant
B-352	176 (80) 30 days	Silver	Matte	Tamper-resistant labels	Flexible; solvent resistant; tamper-resistant
B-427	158 (70) 30 days	White	Matte	Self-laminating wire and cable marking	Excellent abrasion and smudge resistance, perforations exist between each row of labels for easy tear-off or fan folding 
B-439	104 (40) 30 days	White/Colors	Gloss	Rating plates and general-purpose labeling	Available in 9 colors
VINYL CLOTH					
B-498	175 (80) 30 days	White	Semi-Gloss	Wire and electronic component marking	Repositionable adhesive 

-  These materials have static dissipative adhesives.
-  *These materials are UL recognized.
-  *These materials are CSA approved.

*Refer to the full page charts on pages 280-281 for more information and complete listing of parts.

MATERIAL TO SURFACE CROSS REFERENCE GUIDE

Part Number	SMOOTH	TEXTURED/ROUGH	HIGHLY TEXTURED/ LOW SURFACE ENERGY
BRADYBONDZ™ <i>White</i> B-423, B-433, B-354, B-359, B-459, B-488, B-7546, B-8423, B-8425 <i>Metallized</i> B-428, B-438, B-7576 <i>Clear</i> B-358, B-430, B-7566	 YES (i.e. Steel, Aluminum, Plastic, Glass)	NO	NO
SUPER BRADYBONDZ™ <i>White</i> B-350, B-351, B-353, B-422, B-437, B-439, B-498 <i>Metallized</i> B-352, B-434, B-435 <i>Clear</i> B-432	 YES (i.e. Steel, Aluminum, Plastic, Glass)	 YES (i.e. Textured ABS, Painted Enamel Cast Metal, Polycarbonate)	NO
ULTRA BRADYBONDZ™ <i>White</i> B-483, B-484, B-489, B-499 <i>Metallized</i> B-486	 YES (i.e. Steel, Aluminum, Plastic, Glass)	 YES (i.e. Textured ABS, Painted Enamel Cast Metal, Polycarbonate)	 YES (i.e. Powder Coated, Polypropylene Highly Textured & Low Surface Energy ABS)

MATERIALS CHART

Material	Color	Finish	Adhesive	Max. Service Temp. (30 days)	Ribbon	Agency Approvals	Color Code	
B-350	Polyester/Paper	White	Gloss	Acrylic	194° F (90° C)	R6000	UL	●
B-351	Vinyl	White	Matte	Acrylic	176° F (80° C)	R6200		●
B-352	Vinyl	Silver	Matte	Acrylic	176° F (80° C)	R6000		●
B-353	Paper	White	Matte	Acrylic	194° F (90° C)	R4300		●
B-354	Polyester/Paper	White	Gloss	Acrylic	194° F (90° C)	R6200	UL**	◆
B-358	Acetate	Clear	Gloss	Acrylic	176° F (80° C)	R6200		◆
B-359	Acetate	White	Gloss	Acrylic	176° F (80° C)	R6200		◆
B-407	Polyolefin	Clear	Matte	Acrylic	194° F (90° C)	R6200		◆
B-422	Polyester	White	Glossy	Acrylic	248° F (120° C)	R6000	CS UL	●
B-423	Polyester	White	Glossy	Acrylic	248° F (120° C)	R6000	CS UL AGA	◆
B-428	Polyester	Silver	Matte	Acrylic	176° F (80° C)	R4300	CS UL AGA	◆
B-430	Polyester	Clear	Glossy	Acrylic	212° F (100° C)	R6000	CS UL	◆
B-432	Polyester	Clear	Glossy	Acrylic	212° F (100° C)	R6000	CS UL	●
B-433	Polyester	White	Glossy	Acrylic	212° F (100° C)	R4900	UL	◆
B-434	Polyester	Silver	Glossy	Acrylic	194° F (90° C)	R6000	CS UL	●
B-435	Polyester	Silver	Glossy	Acrylic	194° F (90° C)	R6000	CS UL AGA	●
B-437	Polyvinylflouride	White/Yellow	Matte	Acrylic	275° F (135° C)	R4300		●
B-438	Polyester	Silver	Matte	Acrylic	104° F (40° C)	R4300	UL	◆
B-439	Vinyl	*	Glossy	Acrylic	104° F (40° C)	R6000		●
B-459	Polyester	White	Matte	Acrylic	212° F (100° C)	R6000	CS UL	◆
B-483	Polyester	White	Glossy	Synth. Rubber	248° F (120° C)	R6000	CS UL	■
B-484	Polyester	White	Glossy	Synth. Rubber	248° F (120° C)	R6000	UL	■
B-486	Polyester	Silver	Matte	Synth. Rubber	248° F (120° C)	R4300	CS UL	■
B-488	Polyester	White	Matte	Acrylic	370° F (160° C)	R4300	CS UL AGA	◆
B-489	Polyester	White	Matte	Synth. Rubber	248° F (120° C)	R4300	CS UL	■
B-498	Cloth	White	Matte	Rubber	175° F (80° C)	R4300		●
B-499	Nylon Cloth	White	Matte	Acrylic	194° F (90° C)	R4900	CS UL	■
B-7546	Polyester	White	Gloss	Acrylic	175° F (80° C)	R6000	CS UL	◆
B-7566	Polyester	Clear	Gloss	Acrylic	175° F (80° C)	R6000		◆
B-7576	Polyester	Silver	Matte	Acrylic	212° F (100° C)	R6000	UL	◆
B-8423	Polyester	White	Glossy	Acrylic	248° F (120° C)	R6000	CS UL AGA	◆
B-8425	Polyolefin	White	Matte	Acrylic	194° F (90° C)	R6200	CS UL	◆

* B-439 is available in 10 colors (Black, Gold, Green, Light Blue, Orange, Purple, Red, Silver, White, Yellow).



*These materials are UL recognized.



*These materials are CSA approved.



*These materials are AGA approved.

*Refer to the full page charts on pages 280-281 for more information and complete listing of parts.

**Currently in testing.

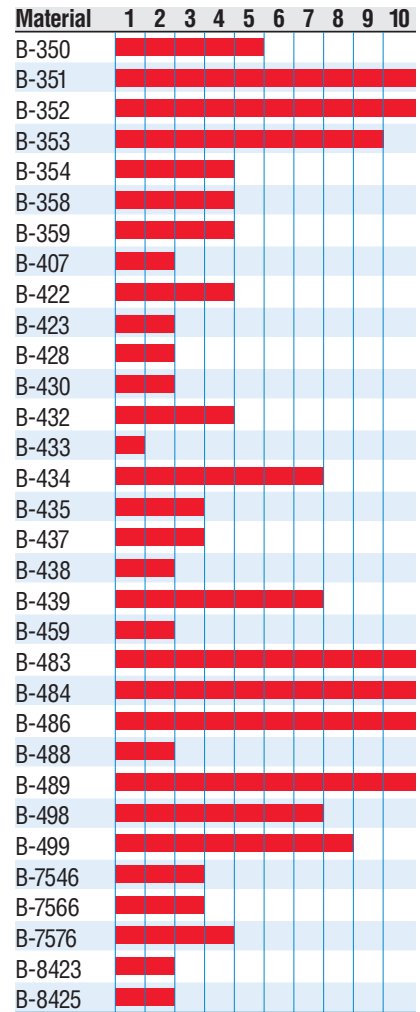
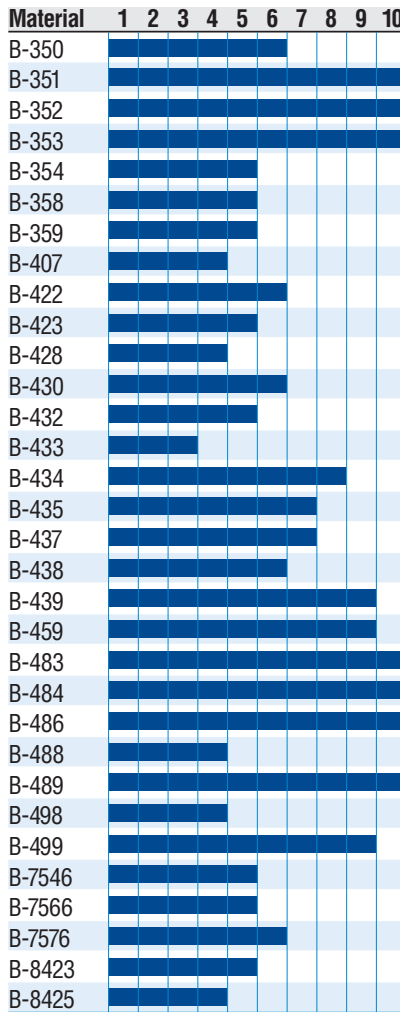
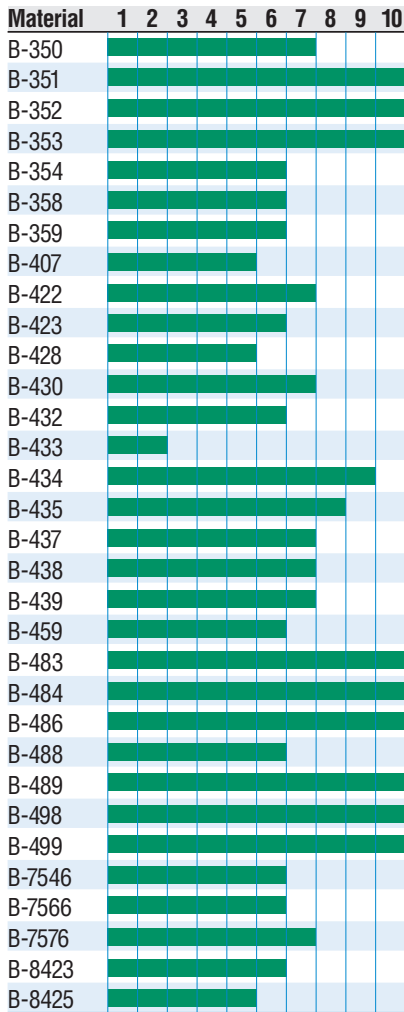
Industrial Material Comparison Chart

SMOOTH	
Typical surface energy levels for this category are above 50 Dynes/cm.	
SURFACES	
Stainless Steel	Tin
Copper	Glass
Aluminum	Smooth Metal
Smooth Plastic	

TEXTURED/ROUGH	
Typical surface energy levels for this category are between 38 Dynes/cm and 50 Dynes/cm.	
SURFACES	
Cast Metal	Polyurethane
Nylon	ABS
Alkyd Enamel	Polycarbonate
Polyester	PVC
Epoxy Paint	Acrylic

HIGHLY TEXTURED/ LOW SURFACE ENERGY	
Typical surface energy levels for low surface energy products are below 38 Dynes/cm.	
SURFACES	
Polystyrene	Polypropylene
Acetal	Teflon
Polyethylene	Powder Coatings
Highly Textured	ABS

1 = LOWEST ADHESIVE BOND 10 = HIGHEST ADHESIVE BOND



These charts are based on relative adhesion after 24 hour dwell within each given surface energy category.

Adhesion is the attraction between unlike materials. The strength of the adhesion is determined by the surface energy of the item being identified. The higher the surface energy, the greater the likelihood for the label to adhere. A lower surface energy product will be more difficult for a label to adhere.

For additional technical information on any Brady material, please visit the Brady website at www.bradyid.com.

All Brady ribbons are developed to meet the performance requirements of the materials to be printed. The reason for this is that the bond between the ribbon and the label is critical to the success of the legend permanence. Brady offers a complete line of ribbons that are designed to cover all your label application requirements.

Please refer to Ribbon/Material Cross Reference Chart on the following page to determine the appropriate ribbon/material combination.

Ribbon Series	Formulation	Available Colors	Performance Characteristics
R4300	Wax/Resin	Black	Strong environmental resistance against smearing and chemicals. Also, reliable, sharp-edge print quality to maximize bar code readability.
R4400	Resin	Red, Blue, Green & White	High density, excellent solvent resistance, high heat resistance, super scratch resistance.
R4500	Wax/Resin	Red, Blue & Green	Strong environmental resistance against smearing and chemicals. Also, reliable, sharp-edge print quality to maximize bar code readability.
R4800	Resin	Black	Excellent solvent and scratch resistance. High heat resistance.
R4900	Resin	Black	Superb smear resistance at high temperatures. Superior solvent resistance.
R6000	Resin	Black	High density, excellent solvent resistance, high heat resistant, super scratch resistance.
R6100	Wax	Black	Outstanding durability for a general purpose ribbon. Reduced printhead energy requirements.
R6200	Resin	Black	Designed for harsh environment labeling applications. Superior abrasion, chemical, and heat resistance.
R6300	Resin	Black	Strong environmental resistance against chemicals and washes. Excellent heat resistance.

Ribbon / Width Cross-Reference Guide

	Widths	Series 4300	Series 4400* (colors)	Series 4500* (colors)	Series 4800	Series 4900	Series 6000	Series 6100	Series 6200	Series 6300
A	0.800" x 984'				R4811		R6011		R6211	
	1.000" x 984'	R4311								
	1.570" x 984'	R4306			R4806		R6006**		R6206	
	2.360" x 984'	R4302	R4400	R4500	R4800	R4902	R6000	R6100	R6200	
	3.270" x 984'	R4300	R4402	R4502	R4802	R4900	R6002**	R6102	R6202	R6302
	4.330" x 984'	R4307	R4407		R4807		R6007**	R6107	R6207	
	5.120" x 984'	R4304	R4404			R4904	R6004	R6104		
6.850" x 984'	R4308				R4908	R6008				
B	4.000" x 360'	R4301				R4901	R6001	R6101	R6201	
C	1.570" x 500'	R4303					R6003**	R6103		
	2.360" x 500'	R4305					R6005	R6105		
	4.330" x 500'	R4309					R6009**	R6109		

A- Ribbons for standard Brady printers, core ID 1.000", ink side out
 B- THT Model 1024, THT Model 1244 and THT Model 1344, core ID 0.500", ink side in
 C- Ribbons for THT Model 4042 and Intermec 3440 printers, core ID 1.000", ink side out

* The Series 4400 and 4500 ribbons are offered in the following colors: Red, Blue, Green, White (R4400 only) and Silver (R4500 only).

**The Series 6000 ribbons marked with double asterisks are available on fiber or plastic cores for clean room applications. (example: R6006 and R6006PC)

FYI

How to find out how many labels per THT ribbon:

Our THT ribbons are 984 feet long.

984 ft x 12 inches = 11,808 inches
 11,808 divided by label vertical repeat = labels per ribbon.

To find your vertical repeat, see Index starting on page 84. Use column D for your vertical repeat.

Ribbon / Material Cross-Reference Guide

RIBBON / MATERIAL CROSS-REFERENCE GUIDE THERMAL TRANSFER LABELS

B#'s	Material	Series 4300	Series 4400 (colors)	Series 4500 (colors)	Series 4800	Series 4900	Series 6000	Series 6100	Series 6200	Series 6300
109	Tag	●							△	
341	PermaSleeve™	●								
342	PermaSleeve	●								
350	Polyester/Paper		△			△	●			
351	Vinyl	△							●	
352	Vinyl						● UL			
402	Paper	△		△				●		
407	Polyolefin					△			●	
408	Paper	△		△				●		
411	Tag	●								
412	Tag	△							●	
422	Polyester		△			△ UL/CSA	● UL/CSA		△	
423	Polyester		△			△ UL/CSA	● UL/CSA/AGA		△	
424	Paper	●		△				△		
426	Polyimide	●								
427	Vinyl	● UL		△					△ UL	
428	Polyester	● UL/CSA/AGA		△					△ CSA	
430	Polyester		△			△ UL/CSA	● UL/CSA		△	
432	Polyester		△			△ UL/CSA	● UL/CSA		△	
433	Polyester		△			△ UL	●		△	
434	Polyester				△ UL/CSA	△ UL/CSA	● UL/CSA		△	
435	Polyester					△ UL	● UL/CSA/AGA		△	
436	Polyimide	●								
437	Tedlar	●							△	
438	Polyester	● UL		△						
439	Vinyl		△			△	●		△	
449	Polyolefin								●	
457	Polyimide						● UL			
459	Polyester		△ UL			△ UL/CSA	● UL/CSA			
461	Polyester	●		△					△	
464	Polyester						●			
473	Polyester					△ UL	● UL/CSA		△	
477	Polyimide						● UL			
478	Polyimide						● UL			
479	Polyimide				△ UL		● UL			
483	Polyester		△			△ UL	● UL/CSA		△	
484	Polyester		△			△ UL	● UL/CSA*			
486	Polyester	● UL/CSA		△					△ CSA	
487	Polyimide				△ UL		● UL			
488	Polyester	● UL/CSA/AGA							△ UL/CSA	
489	Polyester	● UL/CSA							△ UL/CSA	
495	PEN						● UL			
497	Polyimide				△ UL		● UL			
498	Vinyl Cloth	△			△ UL		● UL		● UL	
499	Nylon	△ UL		△		● UL	△		△	
520	Glass Cloth									●
7546	Polyester		△				● UL/CSA			
7576	Polyester		△				● UL			
8423	Polyester		△				△ UL*/CSA*		● UL*/CSA*	
8425	Polyolefin		△						●	

●	Recommended ribbon for use with respective material.
△	Acceptable ribbon for use with respective material.
*UL	These materials are now in UL testing.
UL	These materials are UL recognized with its respective ribbon.
*CSA	These materials are now in CSA testing.
CSA	These materials are CSA approved with its respective ribbon.
UL/CSA	These materials are UL & CSA approved with its respective ribbon.
AGA	These materials are AGA approved.

All Brady ribbons are developed to meet the performance requirements of the materials to be printed. The reason for this is the bond between the ribbon and the label is critical to the success of the legend permanence. Brady offers a complete line of ribbons that are designed to cover all your label application requirements.