

# Rapid-Roll® Synthetic Tag Portfolio

Ready for the Outdoors Challenge



## Product Information

The demand for synthetic materials continues to increase, with applications requiring diverse attributes – superior strength, UV stability, chemical and moisture resistance, sharp graphics and more. Select from our extensive offering of synthetic tag products designed to maintain the look, feel and processing capabilities of paper, with the strength and durability achieved only from a film-based substrate.

### Tear Resistance

This feature is needed if the material must withstand stress and external forces without breaking. Materials can use a multilayer structure, biaxial orientation or other additives to achieve the required strength – including tear resistance and puncture resistance.

### Durability

For applications requiring long term outdoor use, extreme weather conditions or contact with harsh chemicals, durability is a key quality. Despite a paper-like appearance, films can have a durability similar to plastic and withstand moisture, high/low temperature, UV exposure, chlorine, acids and oils.

### Printability

All films in the portfolio are designed for printing. Thermal transfer and line copy is predominant in tags, while 4-color process may also be required. Coatings and corona treatment can both be used to enhance the printability of films. The portfolio includes good to excellent print surfaces on matte and semi gloss facestocks.

## Applications

- Tags
  - Lumber and brick (single and pallet load)
  - Steel rebar
  - Nursery and plant identifier
  - Outdoor furniture
  - Lawn and garden equipment
  - Bag and luggage
  - Chemical and warning labeling
  - Sign and fencing
- Outdoor maps, guides and signage
- Sport and game licensing



## Rapid-Roll® & Tyvek®

Unique physical properties make Tyvek versatile, recyclable and printable. It is strong, lightweight and opaque with high resistance to water, chemical abrasion and aging. Tyvek is ideal for a broad range of applications requiring printing and converting. Recommended uses include tags for pallet and brick, carpet and furniture, loop around tags, wristbands and more. It is limited to applications not requiring stiffness.

- Tyvek Brillion – Whiter and more uniform in caliper than other Tyvek grades, providing excellent thermal transfer printing. Also available with a flame retardant coating.

## Rapid-Roll® & Valéron®/V-MAX®

Valéron uses a unique manufacturing process of extrusion, orientation, bias cutting and cross lamination, providing a tear resistant flexible film. Both Valéron® and V-MAX® films are weather resistant for one year outdoors and provide chemical resistance while accepting thermal transfer ribbons. These films have a very flexible structure, making them easy to perforate and ideal for industrial tags.

- Uncoated grades are FDA acceptable for direct food.
- Coated grades enhance printability on both sides.

### Rapid-Roll® & V-MAX®

High density polyethylene films that maintain their properties even in harsh environments

### Rapid-Roll® & Valéron®

Cross laminated high density polyethylene provides outstanding strength and tear resistance in all directions.

## Rapid-Roll® HS HDPE

High Strength (HS) HDPE is a two-sided, corona treated polyethylene designed for flexo and thermal transfer printing on both sides. It is a high density print grade polyethylene film that maintains its properties even in harsh environments, with an operation temperature range of -70F to +200 degrees F. This material is chemical resistant and will withstand UV exposure outdoors for one year. Recommended applications include tags for fence and lumber, tree and brick, plant and nursery, product ID, and water resistant and chemical resistant. HS HDPE films also work well in applications requiring sewing, stapling, grommeting and wire tying.

## Rapid-Roll® & Yupo®

Yupo synthetic paper is 100 percent recyclable, waterproof and tree-free. It has excellent surface uniformity and high opacity for two-sided printing. Ideal applications include tags for ID membership and nursery, insurance cards, and shelf talkers.

## Rapid-Roll® & Polyart®

On the market for more than 40 years, Polyart is for printers seeking a reliable and high quality synthetic paper. Polyart is clay coated on both sides, providing excellent ink holdout and fast drying time. Key features include excellent water and chemical resistance and resistance to tearing in both directions. Applications involving frequent handling, humidity and outdoor use are a good match for Polyart.

## Rapid-Roll® & Polyolith®

Polyolith is a mineral enhanced calendered polypropylene with enhanced printability. The film is strong, durable, and moisture and chemical resistant, making it ideal for almost any application including nursery tags, shelf talkers, cards, signage and price marking. Polyolith is recyclable.

- GC-3 - High tear resistance with excellent print quality.
- GC-2 - Excellent stiffness with excellent print quality. Can be rough on dies.

## Rapid-Roll® & Smudgeproof Kimdura®

Smudgeproof Kimdura features a superior print surface with excellent surface uniformity and high opacity for two-sided printing. Kimdura is known for its consistency and resistance to chemicals and moisture. Ideal applications include tags for ID membership and nursery, insurance cards, and shelf talkers.

For more information on Rapid-Roll® products contact your Avery Dennison representative or visit [www.label.averydennison.com/rapidroll](http://www.label.averydennison.com/rapidroll)

Product Information

Product	Spec# - Product Description	Caliper - Test Method T411	Tear Strength (lbs) MD/CD	Tensile (lbs) MD/CD	Opacity	Sew or Perf	Max Web Process Temp	UV Resistance/Outdoor Durability
<b>Tyvek</b> Spunbound HDPE compressed for durability and printability	79108 - Fasson® Rapid-Roll® 1025DR Tyvek® <b>79109 - Fasson® Rapid-Roll® 1056DR Tyvek®</b> 79110 - Fasson® Rapid-Roll® 8740D Tyvek® 79111 - Fasson® Rapid-Roll® 1073D Tyvek® 75723 - Fasson® Rapid-Roll® 1079 Tyvek® 75724 - Fasson® Rapid-Roll® 1085D Tyvek®	6.3	1.2/1.1 elmendorf	24.2/27.9	97%	Yes	-100°F to 175°F	1-3 months
<b>Tyvek Brillion</b> Whiter, smoother option of spunbound HDPE nonwoven. Corona and anti-stat treated on both sides. Flame retardant	<b>79656 - Fasson® Rapid-Roll® 4173D Tyvek® Brillion® 6.1 Mil</b> 79687 - Fasson® Rapid-Roll® 4173D Tyvek® Brillion® FR FR = meets FMVs 302	6.1	5.5/5.5 elmendorf	47/51	96%	Yes	-100°F to 175°F	1-3 months
<b>Valeron Coated</b> C2S print coated, cross laminated high strength polyethylene film - trademarked by VSF	<b>75728 - Fasson® Rapid-Roll® 7.5 Mil C2S Valeron®</b> 75702 - Fasson® Rapid-Roll® 9.5 Mil C2S Valeron®	7.5	13.4/13.4 graves	42/45	64%	Staple/ Stitch	-70°F to 220°F	1 Year
<b>Valeron Uncoated</b> Cross laminated high strength polyethylene film - trademarked by VSF	<b>75741 - Fasson® Rapid-Roll® 6.5 Mil Uncoated Valeron®</b> 75759 - Fasson® Rapid-Roll® 8.6 Mil Uncoated Valeron®	6.5	13.4/13.4 graves	42/45	60%	Staple/ Stitch	-70°F to 220°F	1 Year
<b>V-MAX Coated (Select Plus)</b> C1S and C2S single layer HDPE - trademarked by VS	75946 - Fasson® Rapid-Roll® 4.5 Mil C1S V-Max Select Plus™ <b>78004 - Fasson® Rapid-Roll® 7 Mil C2S V-Max Select Plus™</b> 75929 - Fasson® Rapid-Roll® 10 Mil C2S V-Max Select Plus	7.0	6.8/6.0 graves	27/28.5	72%	Perf/ Score	-70°F to 220°F	1 Year
<b>V-MAX Uncoated (Select)</b> Corona treated 2 side single layer HDPE - trademarked by VSF	76654 - Fasson® Rapid-Roll 6.5 Mil V-Max® Select™ <b>75947 - Fasson® Rapid-Roll® 7.5 Mil V-Max Select™</b> 75928 - Fasson® Rapid-Roll® 10 Mil V-Max Select™	7.5	7.6/6.6 graves	30/33	70%	Perf/ Score	-70°F to 220°F	1 Year
<b>HS HDPE</b> Corona Treated 2 Side high strength HDPE	B0928 - Fasson Rapid-Roll 6 Mil HS HDPE <b>B0930 - Fasson Rapid-Roll 7.5 Mil HS HDPE</b> B0931 - Fasson Rapid-Roll 10 Mil HS HDPE	7.5	1/4.3 elmendorf	11.7 / 9.2	82%	Yes	-70°F to 220°F	1 Year

Data reflects Spec# highlighted in **BOLD**  
Tear Strength: Elmendorf - initiated tear / Graves - uninitiated tear

FDA Acceptability	Standard Line Copy	Able to Hold Register	4-Color Process	Thermal Transfer	Writability (ballpoint)	Other print methods	Attributes	Limitations	End-use Applications
No	Good	Fair	Poor	Not Recommended	Good	HP Indigo UV Inkjet*	Soft cloth like feel with high tear strength	Wide caliper variability, limited to applications not requiring stiffness	Law tags, industrial tags and wristbands
No	Excellent	Fair	Good	Good	Good	HP Indigo UV Inkjet*	Better caliper profile and more uniform appearance vs other Tyvek Products. ANSI "B" or better	Limited to applications not requiring stiffness	Thermal Transfer printed high strength: law tags, furniture and mattress tags, wristbands
No	Good	Fair	Good	Excellent	Good	Ion Dep	Coating eliminates static and curl. Resists tearing, puncturing and outdoor durable for one year. Printable. Can be perforated, stapled and stitched	Dimensional stability limits printing	Pilfer-resistant packaging, steel/rebar tags, pallet load tags and other industrial tags, sporting licenses
Yes	Good	Fair	Poor	Fair/Good	Poor		Resists tearing, puncturing and outdoor durable for one year. Printable. Can be perforated, stapled and stitched. FDA acceptable and HDPE recyclable	Low opacity, static and dimensional stability limits printing	Pilfer-resistant packaging, steel/rebar tags, pallet load tags and other industrial tags, sporting licenses
No	Good	Fair	Good	Excellent	Good	Ion Dep	Coating eliminates static and curl. Good strength for single layer film. Can be die cut, perfed, sheeted, scored and guillotined	Dimensional stability limits printing	Industrial tags requiring outdoor UV durability
Yes	Good	Fair	Poor	Fair/Good	Poor		Good strength for single layer film. Can be die cut, perfed, sheeted, scored and guillotined. Recyclable 2HDPE	Single ply film with low opacity, static and dimensional stability limits printing	Industrial tags requiring outdoor UV durability
Yes	Excellent	Excellent	Excellent	Excellent	Excellent	Offset	Dimensional Stability and one option for all printing needs		Industrial tags requiring outdoor and UV durability with excellent process printing and stiffness requirements

\* UV Inkjet: specific printer testing required



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<b>Polyolith GC-3</b> Two side matte finish polypropylene that prints like paper with film strength durability	78250 - Fasson® Rapid-Roll® 4 Mil Polyolith® GC-3 78251 - Fasson® Rapid-Roll® 6 Mil Polyolith® GC-3 <b>78232 - Fasson® Rapid-Roll® 7 Mil Polyolith® GC-3</b> 78168 - Fasson® Rapid-Roll® 10 Mil Polyolith® GC-3	7.0	9.9/15.4 elmendorf	11.0/8.2	90%	Yes	-23°F to 212°F	1 Year
<b>Polyolith GC-2</b> Matte finish, calcium carbonate-filled and calendared polypropylene	75822 - Fasson® Rapid-Roll® 6 Mil Polyolith® GC-2 <b>75735 - Fasson® Rapid-Roll® 8 Mil Polyolith® GC-2</b> 75736 - Fasson® Rapid-Roll® 10 Mil Polyolith® GC-2	8.0	8.8/5.5 elmendorf	8.8/5.5	91%	Yes	-23°F to 212°F	1 Year
<b>Polyart</b> Matte C2S biaxially oriented HDPE	77039 - Fasson® Rapid-Roll® 5.5 Mil Polyart® <b>77038 - Fasson® Rapid-Roll® 7 Mil Polyart®</b> 77040 - Fasson® Rapid-Roll® 8.5 Mil Polyart® 77041 - Fasson® Rapid-Roll® 10 Mil Polyart®	7.0	3.2/4.25 elmendorf	8.8/10.2	97%	Yes	-10°F to 120°F	1.5 Years
<b>Smudgeproof Kimdura</b> Smudgeproof coated multilayer biaxially-oriented - filled polypropylene	<b>16801 - Fasson® Rapid-Roll® 8 Mil C1S Smudgeproof Kimdura®</b> 16807 - Fasson® Rapid-Roll® 10 Mil C1S Smudgeproof Kimdura®	8.0	24/11 elmendorf	54.1/160.4	98.5%	Perf/Score	25°F to 170°F	1 Year
<b>Yupo</b> Multi-layer biaxially-oriented - filled polypropylene	<b>76786 - Fasson® Rapid-Roll® 8 Mil FPG 200 YUPO®</b> 76785 - Fasson® Rapid-Roll® 10 Mil FPG 250 YUPO®	8.0	24/11 elmendorf	61.5/164	98%	Perf/Score	25°F to 170°F	1 Year

Data reflects Spec# highlighted in **BOLD**  
Tear Strength: Elmendorf - initiated tear / Graves - uninitiated tear

FDA Acceptability	Standard Line Copy	Able to Hold Register	4-Color Process	Thermal Transfer	Writability (ballpoint)	Other print methods	Attributes	Limitations	End-use Applications
Yes	Excellent	Good	Excellent	Excellent	Good	Not recommended for Jetrion	Excellent candidate for applications where durability, strength, moisture, chemical resistance and superior print quality is required	Exposure temp is less than 150F and avoid aqueous acidic solutions - may affect coating	Cards, banners, charts, menus, key and lumber tags, price marking, steel and re-bar tags
Yes	Excellent	Good	Excellent	Excellent	Good	Ion Dep/Not recommended for Jetrion	UV stable 9-12 months. Water and chemical resistance. Even cross web caliper. Good opacity and printability	Abrasive to dies	Nursery tags, shelf talkers, cards, banners, signage and other hang tags
No	Excellent	Fair/Good	Excellent	Excellent	Excellent	Dot matrix/ Ion Dep/ UV inkjet*	Good strength and opacity for two side printing. Resistant to oils and chemicals, can be die cut, perfed, sheeted, scored and guillotined. Recyclable in 2HDPE	Dimensional stability- press and design dependent	Chemical resistant tags, nursery tags
No	Excellent	Excellent	Excellent	Excellent	Excellent	Dot matrix/ Ion Dep/ UV Inkjet*	Superior print surface, excellent surface uniformity and high opacity for two side printing	Becomes brittle at subzero temperatures	ID membership tags, insurance cards, retail product tags, shelf talkers, nursery tags
Yes	Excellent	Excellent	Excellent	Fair	Fair	Offset	Excellent surface uniformity and high opacity for two side printing	Becomes brittle at subzero temperatures	ID membership tags, insurance cards, retail product tags, shelf talkers, nursery tags

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