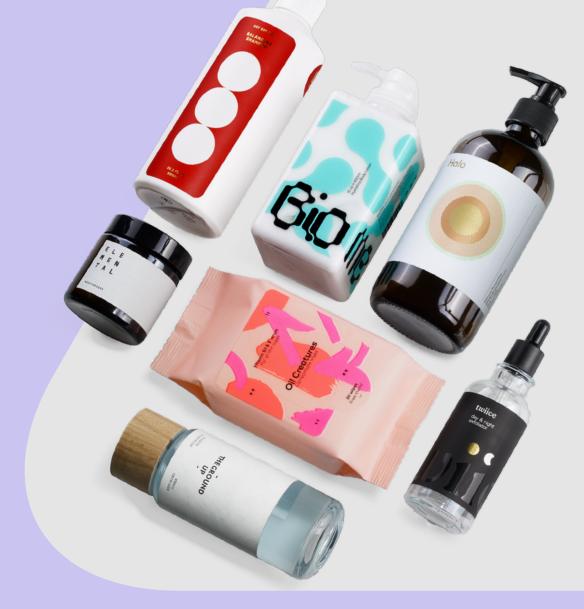
Avery Dennison Label and Packaging Materials Product Component Guide

ASEAN June 2023

Product Component Guide

ASEAN 2023







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How to Use this Guide

Facestock

Adhesive

Basis Weight

The average weight of the facestock in grams per square meter of material.

Initial Tack

Defines the degree to which the product adheres to the substrate on first contact.

Ultimate Adhesion

Identifies the long-term adhesive strength.

Minimum Application Temperature

The minimum temperature at the time of application of the label. The substrate must be clean at the time of application.

Service Temperature Range

The range of temperatures within which the properties of the applied label are substantially unchanged over a prolonged period of time. The actual duration and temperature extremes depend also on the type of face material used, the substrate and environment.

Basis Weight

The average weight of the liner in grams per square meter of material.

Thickness

The thickness of the facestock in microns.

Applications

• Freezer

Adhesives suitable for application to substrates at temperatures down to -20°C

Chilled

Suitable for use on dry surfaces that may be exposed to condensation after application.

Wet Surfaces

Suitable for use on surfaces where partially exposed to limited moisture or condensation.

Tight Mandrel

Suitable for low diameter substrates greater than 15mm on glass and PE. Prior testing is highly recommended.

Ice Bucket

Suitable for submersion in ice bucket for periods of up to 2 hours.

Thickness

The thickness of the liner in microns.

Sustainable ADvantage

Liner



Reduction in the Use of Materials

Use only what is necessary



Enables Recyclability, Reuse, or Compostability

What we use can be used again



Contains Recycled or Renewable Content

Give a second life to what has already been used



Responsibly Sourced

Products sourced from a supply chain that shows care for people and the environment



Important Information

Avery Dennison provides a broad range of solutions from Paper to Films, with many different adhesives available for different application needs.

Critical Substrates

Substances such as textiles, plasticised vinyls, apolar and rough surfaces.

Food Contact Status

For direct or indirect contact to food, adhesives must be certified to comply with international standards. The two most widely recognised standards are:

- FDA (Food and Drug Administration) from the United States.
 - Indirect food contact (separated by a functional barrier) FDA 21CFR175.105
 - Direct contact to poultry, dry food, and processed, frozen, dried, or partially dehydrated fruits and vegetables – FDA 21CFR175.125 (a)
 - Direct food contact to raw fruit and raw vegetables FDA 21CFR175.125 (b)
- · BfR (Federal Institute for Risk Assessment) from Germany.
 - Direct contact with dry and moist non fatty foodstuffs for Plastic Dispersions (e.g., acrylic emulsion adhesives) Bfr XIV
 - Direct contact with dry and moist non fatty foodstuffs for Natural & Synthetic rubbers (e.g., hot melt adhesives) – Bfr XXI

A number of Avery Dennison's adhesives are certified to these standards. Please contact your local Avery Dennison representative for an up-to-date listing of foodcertified adhesives.

Quality Assurance

Avery Dennison self-adhesive materials are manufactured to high quality standards and are certified to ISO 9001:2008.

Regulations and Specifications

Many Avery Dennison products have been tested to, and meet the various requirements of important regulations and international specifications such as toy labelling, labels for marine use, food labelling, industrial specifications, etc. Details can be made available upon request for each individual product.



Recommended Storage Conditions

- Store at a temperature of 20-25°C and a relative humidity of 40-50%.
- · Original Packaging.
- · Away from direct sunlight.
- Store reels of printed labels horizontally.
- Rotate stocks so that oldest material is used first.
- Ensure that winding tension of printed label reels is not too tight in order to prevent adhesive bleed.
- Repack partly-used reels of raw material or printed labels in their original packaging or identical packaging material.

Important Notice

Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of any material for a specific purpose.

Warranty

Avery Dennison products are manufactured under careful quality control and are warranted to be free from defect in materials and workmanship. Any material shown to our satisfaction to be defective at the time of delivery will be compensated as per local country policy on the roll(s) returned. The manufacturer will not be responsible for claims beyond replacement of the material. No sales person, representative or agent is authorised to give any guarantee, warranty or make any representation contrary to the foregoing.

All products described herein are sold subject to Avery Dennison's standard conditions of sale, a copy of which is available upon request.

Environmental Aspects

Avery Dennison is committed to protecting the environment and manufacturing safe products. We are actively involved in a continuous search for base materials and manufacturing technologies that have the least possible impact on the environment. For information on individual products or components please contact your Avery Dennison representative.

Disclaimer Information

Specific products must be used for the following applications – hot-fill or freshly blown molded bottles, blood bags, and products for primary food contact. Outdoor use of PVCs (due to plasticiser migration) and synthetic films when exposure to direct UV light can in no way be guaranteed. Check with Marketing on recommended life. Wine labels – The selection of suitable varnishes for white wine applications needs to be made in conjunction with your ink supplier and with the knowledge that uncoated paper stocks will exhibit higher moisture ingression versus alternative substrates.



Facestock



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Facestock / Quick Compare Guide

Prime Paper		Printability	Tensile Strength	Label Dispensing	Glossiness
Cast Coated	High Gloss Paper	****	****	****	****
	High Gloss Elite FSC ♥	****	***	****	****
	Gloss Plus FSC ♥ **	****	****	***	***
Machine Coated	MC Prime FSC [⊕]	★★★★ ☆	****	***	***
	MC Primecoat GP FSC	***	****	***	***
	rMC Primecoat FSC ♥♥	***	****	***	***
	MC Elite FSC [™]	***	***	***	***
	<u>LW 60 FSC</u> ⊕ ♥	***	***	***	***
Uncoated	<u>Vellum FSC</u> [⊕]	***	**	***	_
	Vellum Elite FSC ☐ ♥	***	**	***	_

^{*} All Prime papers are coated with Optical Brightening Agent (OBA)

^{**} Gloss Plus post-varnish is comparable with High Gloss Paper

Clear Films		Printability	Die Cutting	Label Dispensing	Conformability	Clarity
Polyethylene	PE85 Top Trans	****	***	****	****	***
	PE85 NTC Trans	***	****	***	****	****
	PE75 NTC Trans	***	****	***	****	****
Polyolefin	Flex+ Clear NTC **	***	****	****	***	****
Polypropylene	PPNg Top Trans	****	****	****	**	****
	PP50 NTC Clear	***	****	****	**	****
	PP40 Top Clear	****	****	***	***	****
	Overlaminating Gloss PP	**	***	**	***	****
	Overlaminating Matte PP	**	***	**	***	****

^{*} Recommended to conduct dispensing trial before using Flex+ Clear on slope shape or containers with more than usual thinner wall

White Films		Printability	Die Cutting	Label Dispensing	Conformability	Opacity
Polyethylene	PE85 Top White	****	****	***	****	****
	PE85 NTC White	***	***	***	****	****
	PE75 NTC White	***	****	***	****	****
Polyolefin	Flex+ White NTC **	***	****	****	***	****
Polypropylene	PP50 Top White	****	****	****	***	****
	PPNg Top Pearlized White	****	****	****	***	****
	PP60 Top White	****	****	****	***	****
	<u>rPP Top White</u> ♥	****	****	****	***	****
	PP50 Top Pearlized White	****	****	***	***	****
	Opalux 55	★★★ ☆	****	****	***	****
Synthetic Paper	Synthetic Paper	***	****	****	**	****
	Synthetic Paper 65	***	****	****	**	****
	PP Top Matte White	***	****	****	**	****

 $^{^* \, {\}sf Recommended} \, {\sf to} \, {\sf conduct} \, {\sf dispensing} \, {\sf trial} \, {\sf before} \, {\sf using} \, {\sf Flex+White} \, {\sf on} \, {\sf slope} \, {\sf shape} \, {\sf or} \, {\sf containers} \, {\sf with} \, {\sf more} \, {\sf than} \, {\sf usual} \, {\sf thinner} \, {\sf wall} \, {\sf on} \, {\sf slope} \, {\sf shape} \, {\sf or} \, {\sf containers} \, {\sf with} \, {\sf more} \, {\sf than} \, {\sf usual} \, {\sf thinner} \, {\sf wall} \, {\sf on} \, {\sf slope} \, {\sf shape} \, {\sf or} \, {\sf containers} \, {\sf with} \, {\sf more} \, {\sf than} \, {\sf usual} \, {\sf thinner} \, {\sf wall} \, {\sf usual} \, {\sf thinner} \, {\sf usual} \, {\sf thinner} \, {\sf usual} \,$



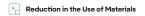
Metallized F	Films	Printability	Die Cutting	Label Dispensing	Conformability	Gloss
Polyethylene	Bright Silver PE85 TC	****	***	***	****	***
Polypropylene	PP50 Silver TC	****	****	****	***	****
	PP TC Silver Elite	****	****	****	***	***
	PP40 Top Silver	****	****	***	***	****

Direct Thermal Papers		Print	Environmental Resistance					
		Definition	Dry	Moisture	Oil	Alcohol	Abrasion	
Direct Thermal	Direct Thermal Premium FSC	****	****	****	****	****	****	
	Direct Thermal 200GP FSC	***	****	****	****	*	****	
	Direct Thermal 200WS FSC ♥	***	****	****	****	***	****	
	Direct Thermal 200GPL FSC	***	****	***	****	-	***	
	Direct Thermal 150RL FSC ♥	***	****	****	****	-	***	
	rDirect Thermal 300LD FSC ♥ ♥	★ ★☆	***	*	-	-	-	
	Direct Thermal 200LL FSC ☐ ♥	***	***	*	-	-	-	

Thermal Tran	isfer Papers	Print Definition
Thermal Transfer	Transtherm 2C FSC [⊕]	****
	Transtherm Plus FSC □ □ ♥	***

Specialty Fi	ilms	Printability	TT Print Definition	Die Cutting	Label Dispensing	Conformability
Polypropylene	Synthetic Paper II	***	****	****	****	**
	Synthetic Paper TR75	***	****	****	****	★★ ☆
	rPP Synthetic Paper	★★★ ☆	***	****	****	★★ ☆
	PP40 Top Matte White	***	***	***	***	***

Durables	Films	Printability	Die Cutting	Label Dispensing	Conformability	Opacity
Polyester	2M White PET TC	****	****	****	*	****
	2M Matte Ch PET TC	****	****	****	*	****
	1M Matte Ch PET TC	****	****	****	**	***
	50µm Matte White PET TC	****	****	****	*	****
	50µm Bright Silver PET TC	***	****	****	*	****
	Copy Code CH PET Plus	***	****	****	*	****
	2M WH PETC TC	***	***	***	*	***



Enable Recyclability, Reuse or Compostability

Contains Recycled or Renewable content

Responsibly Sourced



★★★★Very Good

★★★Good

★★ Fair

★ Low

- Not Applicable



Facestock - Prime Paper

Cast Coated

High Gloss Paper

A white, one side gloss finished cast coated paper.

- Suitable for a wide range of promotional and industrial labels whereby brilliant multicolour print quality and attractive gloss appearance are required.
- Typical applications include labels for use in the cosmetic, pharmaceutical, food industry, chemical products and promotional labels.

Basis Weight 80 g/m²

Thickness 88 µm

Printability ★★★★

Tensile Strength ★★★★☆

Label Dispensing ★★★★

Glossiness ★★★★

High Gloss Elite FSC

An FSC® certified white, one-side cast coated, gloss finished woodfree printing paper.

- · High gloss coating giving brilliant multicolour print quality and attractive gloss appearance,
- Typical applications include labels for cosmetic, pharmaceutical, food products and promotional labels.

Basis Weight 80 g/m²

Thickness 84 µm

Printability ★★★★

Tensile Strength ★★★★☆

Label Dispensing ★★★★★

Glossiness ★★★★

Gloss Plus FSC ♥

An FSC® certified white, high gloss finished woodfree printing paper

- Designed with superior print gloss for applications whereby attractive gloss appearance is required.
- Excellent print gloss can be achieved by suitable varnish. Thinner and lighter facestock with added conformability.
- Typical applications include labels for cosmetic, pharmaceutical, food products and promotional labels.

Basis Weight 80 g/m²

Thickness 70 µm

Printability

Tensile Strength ★★★★☆

Label Dispensing ★★★★

Glossiness ★★★★

Machine Coated

rMC Primecoat FSC ♥ ♥

An FSC® certified semi-gloss, one side machine coated, calendered white printing paper, consists of 50% recycled content.

- Designed for promotional and general industry label applications with attractive semi-gloss appearance and multicolor ink coverage work with very good sustainability credentials.
- Typical applications include labels for food and beverages, health and personal care industry.
- Being produced from 50% post consumer waste (PCW) paper, there is a possibility of higher impurities visibility in the product compared to virgin fiber products.

Basis Weight 80 g/m²

Thickness 70 µm

Printability

Tensile Strength ★★★★

Label Dispensing ★★★★

Glossiness ★★★



Facestock - Prime Paper (continued)

Machine Coated (continued)

MC Prime FSC

An FSC® certified semi-gloss, one side machine coated, calendered white printing paper.

- Suitable for a wide range of promotional and industrial labels applications whereby attractive semi-gloss appearance with heavy multicolor ink coverage work is required.
- · Typical applications include labels for cosmetic, pharmaceutical and food products industry.

Basis Weight 80 g/m² **Thickness**

Printability ★★★☆

70 µm

Tensile Strength

Label Dispensing

Glossiness ***

MC Primecoat GP FSC

An FSC® certified semi-gloss, machine coated, calendered white printing paper.

- Good gloss appearance and suitable for heavy multicolor ink coverage work.
- · Typical applications include labels for cosmetic, pharmaceutical, food products industry and general purposes.

Basis Weight 80 g/m²

Thickness 63 µm

Printability ***

Tensile Strength ****

Label Dispensing

Glossiness

MC Elite FSC 🖪 🤀

An FSC® certified semi-gloss, machine coated, calendered white printing paper.

- · Lighter facestock with good gloss appearance and suitable for heavy multicolor ink coverage work.
- Typical applications include labels for cosmetic, pharmaceutical, food products industry and general purposes.

Basis Weight 70 g/m²

Thickness 61 µm

Printability ***

Tensile Strength ***

Label Dispensing ★★★☆

Glossiness

LW 60 FSC ® ♥

An FSC® certified semi-gloss, one side machine coated, calendered white printing paper.

- Low memory, makes it ideal for tight mandrel applications such as labelling small cylindrical
- · Provides excellent functionality for labelling pharmaceuticals in vials, syringes, dropper

Basis Weight 60 g/m²

Thickness 52 µm

Printability ***

Tensile Strength

Label Dispensing ★★★☆

Glossiness



Facestock - Prime Paper (continued)

Uncoated

Vellum FSC

A white, machine finished, woodfree-printing paper.

- Designed for the manufacture of continuous forms products for use in high speed impact printers.
- · Excellent fanfolding and refanfolding properties, even in high speed wide web EDP printers.
- The facestock's surface structure provides excellent print resolution.
- Ideal for label applications requiring variable information.

Basis Weight 70 g/m²

Thickness 90 µm

Printability ***

Tensile Strength ★★

Label Dispensing ★★★

Glossiness -

Vellum Elite FSC 🖫 🤀

An FSC® certified white, machine finished, woodfree-printing paper.

- Designed to give optimum performance by giving very good results with heavy ink coverage printing while still maintaining enough opacity required for the applications.
- Typical applications for this product include industrial labelling, supermarkets, food packaging, catch-weigh, cosmetics, toiletries, chemical products and promotional labelling.

Basis Weight 60 g/m²

Thickness 78 µm

Printability ★★★

Tensile Strength ★★

Label Dispensing $\star \star \star$

Glossiness -



Facestock - Prime Film

Polyethylene (PE) - Clear

PE85 Top Trans

A blown co-extruded, transparent polyethylene film with a print receptive top coating

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	78 g/m^2
Thickness	82 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****

Clarity

PE85 NTC Trans

A blown co-extruded, corona-treated transparent polyethylene film

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	77 g/m ²
Thickness	82 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****
Claritu	++++

PE75 NTC Trans 🕾

A blown co-extruded, corona-treated transparent polyethylene film

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	70 g/m ²
Thickness	75 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****
Claritu	



Polyethylene (PE) - White

PE85 Top White

A blown co-extruded, white polyethylene film with a print receptive top coating

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	82 g/m ²
Thickness	82 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****

Opacity ★★★★

PE85 NTC White

A blown co-extruded, corona-treated white polyethylene film

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	82 g/m ²
Thickness	82 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****
Opacity	****

PE75 NTC White

A blown co-extruded, corona-treated white polyethylene film

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	74 g/m ²
Thickness	75 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****
Opacity	****



Polyethylene (PE) - Metalized

Bright Silver PE85 TC

A bright metallic polyethylene film with a print receptive top coating on the metalized surface

- Applications are predominantly in home and personal care, requiring durability in end-use with resistance to moisture and content overspill.
- Due to its flexibility, the product is suitable for applications requiring squeezability and conformability, it can be used on substrates such as squeezable bottles and other flexible containers.
- Can be used for applications where PVC labels are not wanted for environmental reasons.

Basis Weight	78 g/m ²
Thickness	85 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****

Gloss

Polyolefin (PO) - Clear

Flex+ Clear NTC 8

A corona-treated, flexible, co-extruded clear polyolefin film

- Designed for the prime label market, specifically the cosmetics, home and personal care segments, where clarity, conformability and adhesion to HDPE and PET containers are required.
- · Recommended for those markets that require the recycling of polyolefin containers.
- · Designed for the "No-Label" look decoration.

Basis Weight	50 g/m ²
Thickness	55 µm
Printability	***
Label Dispensing	****
Die Cutting	****
Conformability	****
Clarity	****

Polyolefin (PO) - White

Flex+ White NTC

A corona-treated, flexible, co-extruded white polyolefin film

- Designed for the prime label market, specifically the cosmetics, home and personal care segments, where clarity, conformability and adhesion to HDPE and PET containers are required.
- · Recommended for those markets that require the recycling of polyolefin containers.

Basis Weight	50 g/m ²
Thickness	55 µm
Printability	****
Label Dispensing	****
Die Cutting	****
Conformability	****
Opacity	****



Polypropylene (PP) - Clear

PPNg Top Trans

A bi-axially oriented, glossy transparent polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight	46 g/m ²
Thickness	50 µm
Printability	****
Label Dispensing	****
Die Cutting	****

Clarity ★★★★

Conformability

PP50 NTC Clear

A biaxially oriented, glossy transparent polypropylene film with coronatreated print skin layer

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 45 g/m²

Thickness 50 µm

Printability ★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★

Clarity ★★★★

PP40 Top Clear 8

A bi-axially oriented, glossy transparent polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 37 g/m²

Thickness 40 μm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★★

Clarity



Polypropylene (PP) - Clear (continued)

Overlaminating Gloss PP

A bi-axially oriented, glossy transparent polypropylene film

- Suitable for use as an overlaminating film providing maximum protection to both film and paper base materials.
- However, depending on the aesthetic requirements, this construction may not be suitable as an overlaminate on dark printed background film labels.

Basis Weight 18 g/m²

Thickness 20 µm

Printability ★★

Label Dispensing ★★

Die Cutting ★★★★

Conformability ★★★

Clarity ★★★★

Overlaminating Matte PP

A bi-axially oriented, matte transparent polypropylene film

- Suitable for use as an overlaminating film providing maximum protection to both film and paper base materials.
- However, depending on the aesthetic requirements, this construction may not be suitable
 as an overlaminate on dark printed background film labels.

Basis Weight 17 g/m²

Thickness 20 µm

Printability ★★

Label Dispensing ★★

Die Cutting ★★★★

Conformability ★★★

Clarity ★★★★

Polypropylene (PP) - White

PP50 Top White

A bi-axially oriented, glossy white polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 50 g/m²

Thickness

Printability ★★★★

50 µm

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★★

Opacity ****



Polypropylene (PP) - White (continued)

PPNg Top Pearlized White

A bi-axially oriented, glossy, pearlized white polypropylene film with a print-receptive top coating.

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- The "pearlized white" appearance of the facestock gives a unique and premium look offering excellent shelf appeal.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight	45 g/m²
Thickness	60 µm
Printability	****
Label Dispensing	****
Die Cutting	****

Opacity ★★★★

Conformability

PP60 Top White

A bi-axially oriented, glossy white polypropylene film with a print-receptive top coating

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 44 g/m²

Thickness 60 µm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★

Opacity ★★★★

rPP Top White ♥

A bi-axially oriented, glossy white polypropylene film with a print-receptive top coating. Film contains 30% recycled content.

- The recycled PP film contains 30% recycled content, making this is a more sustainable label option, helping brands achieve higher recycled content in the packaging.
- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 42 g/m²

Thickness 65 μm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★



Polypropylene (PP) - White (continued)

PP50 Top Pearlized White

A bi-axially oriented, glossy, pearlized white polypropylene film with a print-receptive top coating.

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- The "pearlized white" appearance of the facestock gives a unique and premium look offering excellent shelf appeal.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight	36 g/m ²
Thickness	50 µm

Printability ★★★★ Label Dispensing ★★★

Die Cutting ★★★★

Conformability

-

★ ★ ★ ☆

Opacity ★★★★

Opalux 55

A bi-axially oriented, glossy white polypropylene film with corona-treated print skin layer

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 39 g/m²

Thickness 56 μm

Printability ★★★☆

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★★

Opacity ***

Polypropylene (PP) - Metalized

PP50 Silver TC

A bi-axially oriented, glossy bright metalized polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- · Can be used as a cost effective alternative to metallic foil blocking.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 47 g/m²

Thickness 50 µm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★★

Gloss ★★★★



Polypropylene (PP) - Metalized (continued)

PPTC Silver Elite

A bi-axially oriented, glossy bright metalized polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Can be used as a cost effective alternative to metallic foil blocking.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight	41 g/m ²
Thickness	47 µm
Printability	****
Label Dispensing	****
Die Cutting	****

Gloss ***

Conformability

PP40 Top Silver 🗈

A bi-axially oriented, glossy bright metalized polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- · Can be used as a cost effective alternative to metallic foil blocking.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 36 g/m²

Thickness 40 µm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★★★

Gloss ***

Synthetic Paper

Synthetic Paper

A matte white, high opacity polypropylene film which is suitable for flexographic, letterpress, screen & thermal transfer printing and has high strength and durability as well as good moisture and chemical resistance.

- Gives excellent printing performance in thermal transfer printing as well as conventional printing techniques.
- Suitable ribbon and print setting should be carefully selected to achieve optimum thermal transfer print performance.
- Can be printed well with flexographic, letterpress and screen printing techniques.
- Due to semi-rigid nature of polypropylene, care should be taken with 'non-uniform' surfaces or highly squeezable applications.
- Suitable for use in a wide range of durable labelling applications whereby UL recognition (Indoor Service) is required

Basis Weight 68 g/m²

Thickness 75 µm

Printability ★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★

Opacity



Synthetic Paper (continued)

Synthetic Paper 65

A matte white, high opacity polypropylene film which is suitable for conventional and thermal transfer printing, with durability and good moisture resistance.

- The facestock can be printed with conventional printing techniques.
- This product also gives excellent thermal transfer printing performance when matched with the correct ribbon and print setting.
- Product with high strength and good moisture resistance.
- Therefore, this product can be used for applications requiring durable, variable information labels.
- Due to semi-rigid nature of polypropylene, care should be taken with 'non uniform' surfaces or highly squeezable applications. This product is suitable for use in a wide range of durable labelling applications.

Basis Weight 51 g/m²

Thickness

Printability ***

65 µm

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★

Opacity ★★★★

PP Top Matte White

A bi-axially oriented, high opacity, matte white polypropylene film with a print-receptive top coating

- · Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labelling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- The "matte white" appearance of the facestock gives a unique and premium look offering excellent shelf appeal.
- The facestock can be printed well with conventional printing techniques and with thermal transfer printing, when matched with the correct ribbon. Therefore this product is suitable for variable information labels applications.
- Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to fairly rigid nature of polypropylene, care should be taken with the use on 'non-uniform' surfaces or where a high level of squeezability is desired.

Basis Weight 54 g/m²

Thickness 75 µm

Printability

Die Cutting

Label Dispensing ★★★★

Conformability ★★

Opacity ★★★★



Facestock - VI Paper

Direct Thermal

Direct Thermal Premium FSC **

An FSC® certified, smooth, bright, white woodfree paper with a barrier coated thermosensitive layer.

- · Offers excellent resistance to moisture, fat, oil, etc.
- Typical applications include barcode labels for pre-packed food (e.g. meat, fish, poultry, cheese) and industrial barcoding (e.g. tracking, shelf edge, laboratory, hospital) whereby a high level of image resistance is required.

Basis Weight 74 g/m²

Thickness

Print Definition ★★★★★

77 µm

Environmental Resistance

 Dry
 ★★★★

 Moisture
 ★★★★

 Oil
 ★★★★

 Alcohol
 ★★★★

 Abrasion
 ★★★★

Direct Thermal 200GP FSC

An FSC® certified, smooth, white woodfree paper with a barrier coated thermosensitive layer.

- · Designed with essential resistance to oil, water and heat suited for pre-packed food.
- Typical applications include barcode labels for typical weight scale applications where moderate to high barcode image is required.

Basis Weight 76 g/m²

Thickness 80 µm

Print Definition ★★★★

Environmental Resistance

 Dry
 ★★★★

 Moisture
 ★★★★

 Oil
 ★★★★

 Alcohol
 ★

Direct Thermal 200WS FSC

An FSC® certified, smooth, white matte paper with a barrier coated thermosensitive layer.

- Suitable for general purpose barcode labelling for retail and weight scale printing with medium to low speed barcode thermal printing.
- · Thinner and lighter facestock with added conformability

Basis Weight 67 g/m²

Thickness 70 µm

Print Definition ★★★★

Environmental Resistance

Dry $\star\star\star\star$ Moisture $\star\star\star\star$ Oil $\star\star\star\star$ Alcohol $\star\star\star\star$ Abrasion $\star\star\star\star$

Direct Thermal 200GPL FSC 13

An FSC® certified, white woodfree paper with a barrier-coated thermosensitive layer.

- Designed with essential resistance and suitable for barcode labelling in dry environment for logistic, ship and track printing with medium to low speed barcode thermal printing.
- Thinner and lighter facestock with added conformability

Basis Weight 60 g/m²

Thickness 60 µm

Print Definition ★★★★

Environmental Resistance

Dry
Moisture

At ★★☆

Oil

Alcohol

Abrasion

At ★★★



Facestock - VI Paper (continued)

Direct Thermal (continued)

Direct Thermal 150RL FSC

An FSC® certified, white woodfree paper with a barrier-coated thermosensitive layer.

- · Moderate print quality for barcode labelling where the environment is dry and label life cycle is short
- Suitable for applications such as weighing scale, dry pre-packed food (deli, nuts, etc), e-commerce, ship & track for short distance.

Basis Weight 73 g/m²

Thickness 74 µm

★ ★ ☆ ☆

Environmental Resistance

Print Definition

Dru Moisture Oil *** Alcohol Abrasion

rDirect Thermal 300LD FSC ♥ ♥

An FSC® certified, smooth, white woodfree paper with a thermo-sensitive layer, consists of 15% recycled content.

- The recycled DT paper contains 15% recycled content, making this is a more sustainable label option, helping brands achieve higher recycled content in the packaging.
- Designed for barcode labelling where the environment is dry and the label life cycle is short e.g. warehouse logistics labelling, address labelling, and dry retails barcode labelling.
- · Suitable for barcode labelling with less demanding on image durability.

Basis Weight 70 g/m²

Thickness 75 µm

Print Definition

Environmental Resistance

Dry Moisture Alcohol Abrasion

An FSC® certified, white woodfree paper with a thermo-sensitive layer.

- · Designed with essential resistance and suitable for barcode labelling in dry environment for logistic, ship and track printing with medium to low speed barcode thermal printing.
- Thinner and lighter facestock with added conformability
- Suitable for barcode labelling with less demanding on image durability

Basis Weight 60 g/m²

Thickness 65 µm

Print Definition ★★☆

Environmental Resistance

Dry Moisture Oil Alcohol Abrasion

Baggage Tag FSC

An FSC® certified, smooth, white woodfree paper with a barrier coated thermosensitive layer.

- · Laminated with special BOPP film featuring very good tear resistance.
- Ideal application is labels for airport baggage tag thermal printing system with good print quality and definition.
- · The ink receptive and protective layer features very good resistance to moisture, abrasion, etc., which the baggage tag might contact to during transportation.

Basis Weight 121 g/m²

Thickness 124 µm



Enable Recyclability, Reuse or Compostability

Contains Recycled or Renewable content





Facestock - VI Paper (continued)

Direct Thermal (continued)

Baggage Tag Elite FSC

An FSC® certified, white woodfree paper with a barrier-coated thermosensitive layer

- Basis Weight 114 g/m²
 Thickness 118 µm
- Good tear resistance with heat sensitive paper is laminated with special BOPP film
- Designed for airport baggage tag thermal printing systems with moderate to good print quality and definition.
- The ink receptive and protective layer features essential resistance to moisture, abrasion, etc., which the baggage tag might contact to during transportation

Thermal Transfer

Transtherm 2C FSC ♥

An FSC® certified, bright white, ultra-smooth coated facestock.

- Designed for high quality barcode printing. Compatibility with a wide range of wax and wax-resin thermal transfer ribbons.
- · Offers excellent smudge resistance.
- Applications include address, identification, tracking, and shipping labels for offices, industrial as well as retail.

Basis Weight 81 g/m²

Thickness 89 µm

Print Definition ★★★★

Transtherm Plus FSC 5

An FSC® certified, bright matte white, pigmented woodfree printing paper.

- Designed for use in thermal transfer printers running at slow to high speed.
- Good print resolution with good smudge resistance.
- Applications include address, identification, tracking, and shipping labels for offices, industrial and retail.

Basis Weight 62 g/m²

Thickness 66 µm

Print Definition ★★★★

Laser/Inkjet Paper

LCJ Premium FSC

An FSC® certified, matte white, woodfree, machine finished paper with good opacity, excellent absorption and superior toner bonding characteristics

- Designed for the manufacture of A4 sheets for use in laser printers, copiers and monochrome inkjet printer.
- The facestock's surface structure provides excellent toner bonding and print resolution.
- Ideal for label applications using variable information such as address, instruction and inventory labels, labels for office use and many other applications.

Basis Weight

64 g/m²

Thickness

74 µm



Facestock - VI Film

Direct Thermal

Baggage Tag 300N

A direct thermal opaque white polypropylene film, coated with thermal sensitive material formulation

Basis Weight 70 g/m²
Thickness 85 μm

- · Excellent tear resistance and durability during baggage handling at airport.
- · Offers excellent print quality and definition.
- Ink receptive and protective layer features very good resistance to moisture, abrasion, etc.,
 which the baggage tag might contact to during transportation.

Direct Thermal PP 300N

A white BOPP film with a barrier-coated thermosensitive layer.

- · Designed for high speed barcode thermal printing with good print definition
- · Offers excellent facestock durability, with added conformability.
- Suitable for barcode labelling where excellent resistance to moisture, oils and fats is
 required in the retail and industrial sectors e.g. pre-packed food, meat and fish, laboratory
 items and pharmaceutical applications.
- · Additional durability including smudge and moisture resistance is required.

Thickness 85 µm

70 g/m²

Basis Weight

Facestock - Specialty Paper

Foil

Matte Silver Foil

A top coated aluminium foil, laminated to a white woodfree printing paper, with a matte silver finish

Basis Weight 80 g/m²

65 µm

Thickness

- Designed to provide metalized appearance which is ideal for primary labelling of premium goods such as cosmetics, household goods, toiletries or promotional labels.
- Typical applications include labels for cosmetic, food products and promotional labels.

Bright Silver Foil Prime

A top coated aluminium foil, laminated to a white woodfree printing paper, with a bright silver finish.

• Provide metalized appearance which is ideal for primary labelling of premium good such as cosmetics, household goods, toileteries or promotional labels

Basis Weight 80 g/m²

Thickness 65 µm

Reduction in the Use of Materials

Enable Recyclability, Reuse or Compostability

Contains Recycled or Renewable content

Responsibly Sourced



Facestock - Specialty Paper (continued)

Metallised Paper

Metallised Paper WS

A silver metallized woodfree printing paper with wet strength properties, exhibiting good printability and conversion properties.

· Pairing with Avery Dennison wash-off adhesive, it enables label to stay intact for clean removability during wash off process.

Basis Weight

Thickness

68 g/m²

54 µm

Radiants

Radiants Range FSC

A one side fluorescent coated, woodfree printing paper, available in yellow, orange, red, pink, green

Basis Weight

78 g/m²

Thickness

73 µm

- Designed for applications requiring fluorescent colors to distinguish products.
- · General purpose labels for eye-catching applications such as warning, instruction, promotional, advertising labels and price marking.
- Available in various colours to cater for specific needs.

Wine - Uncoated Paper

Vintage FSC

A white uncoated paper facestock featuring wet strength properties and a new generation coating that provides higher opacity in wet conditions and higher resistance to moisture

110 g/m² **Basis Weight**

Thickness

130 µm

- Primary labelling of wine and premium beverage.
- Delivers good scuff resistance and environmental resistance when offered with a suitable varnish.
- · Where sharp multi-colour work is required. Where high gloss levels are required.

Artisan rPlus FSC

A white, uncoated matte woodfree printing paper, with a felt marked finish, giving the paper a tactile "hand-made" appearance and feel.

- Under-laminated rPET with 25% recycled content to assist with reducing bubbles and wrinkles and maintain structure in an ice bucket. Wet strength and fungicidal treatment.
- Primary labelling of wine, beverage and specialist foods.
- Polymer layer greatly improves moisture barrier properties.
- · Polymer layer reduces the severity of paper fiber swelling induced "bubbling" on difficult substrates.

Basis Weight 124 g/m² **Thickness**

156 µm



Facestock - Specialty Film

Synthetic Paper

Synthetic Paper II

A bi-axially oriented, matte white polypropylene film with a print receptive top coating.

- Gives excellent printing performance in thermal transfer printing when matched with the correct ribbon as well as conventional printing techniques including flexographic, letterpress, and screen printing techniques.
- Applications include labelling of quality products such as cosmetics, toiletries, luxury
 articles and promotional labelling as well as automotive lubricants and household
 chemicals, whereby durability and resistance to moisture as well as variable information
 printing are required.
- Due to semi-rigid nature of polypropylene, care should be taken with 'non-uniform' surfaces or highly squeezable applications.

Basis Weight 62 g/m²

Thickness 78 µm

Printability ★★★★

Label Dispensing ★★★★

Conformability ★★

TT Print Definition

Die Cutting

Synthetic Paper TR75

A bi-axially oriented, matte white polypropylene film with a print receptive top coating.

- Suitable for thermal transfer printing as well as conventional printing techniques, with good durability.
- Can be printed well with flexographic and letterpress.
- Can also be printed with thermal transfer when matched with the correct ribbon.

Basis Weight 59 g/m²

Thickness 75 µm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★

Conformability

TT Print
Definition

★★★★☆

rPP Synthetic Paper ⊘

A matt white polypropylene cavitated film with a print-receptive top coating. Film contains 30% post-industrial waste (PIW) recycled content.

- The recycled PP film 30% post-industrial waste (PIW) recycled content., making this is a more sustainable label option, helping brands achieve higher recycled content in the packaging.
- Excellent printing performance in thermal transfer printing when matched with the correct ribbon as well as conventional printing techniques including flexographic, letterpress, and screen printing techniques.

Basis Weight 49 g/m²

Thickness 70 µm

Printability ★★★☆

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★★☆

TT Print
Definition



Facestock - Specialty Film (continued)

Synthetic Paper (continued)

WBIJ Synthetic Paper

A matte white inkjet synthetic paper material with a highly absorbent surface structure specifically designed for water based inkjet printing approach (WBIJ)

 An ideal choice for printing labels by on-demand-color inkjet printers where full process color is used to add impact and/or functionality to the label.

 The high ink holdout and quick drying provide for excellent clarity and density of printed graphics, making it the perfect choice for primary and secondary packaging labels in retail, manufacturing, health care, and logistics etc. Basis Weight 68 g/m²
Thickness 97 µm

Polypropylene (PP) - White

WBIJ PP Top Gloss White

A gloss white inkjet polypropylene film material with a highly absorbent surface structure specifically designed for water based inkjet printing approach (WBIJ).

• An ideal choice for printing labels by on-demand-color inkjet printers where full process color is used to add impact and/or functionality to the label.

• The high ink holdout and quick drying provide for excellent clarity and density of printed graphics, making it the perfect choice for primary and secondary packaging labels in retail, manufacturing, health care, and logistics etc.

Basis Weight 70 g/m²
Thickness 85 μm

PP40 Top Matte White 3

A bi-axially oriented matte white polypropylene film with a print-receptive top coating.

• The metalized coating is applied to the non-printing side of the film for better block-out feature.

• Ideal for daily, food and household product packaging.

• Ideal for applications requiring 'substrate identical labelling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.

Basis Weight 28 g/m^2 Thickness $38 \text{ } \mu \text{m}$ Printability $\star \star \star$ Label Dispensing $\star \star \star \star$ Die Cutting $\star \star \star \star$ Conformability $\star \star \star$

TT Print
Definition
★★★★



Facestock - Specialty Film (continued)

Polyester (PET) - Clear

PET Top Clear

A clear polyester facestock with a print-receptive top coating.

- Features product features excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.
- Designed for conventional printing techniques. Specially formulated inks are normally not necessary.
- It is however also suitable for thermal transfer printing. Ink/ribbon testing is always recommended before production. Suitable for use in a Pop-Up labelling applications.

Basis Weight

72 g/m²

Thickness

50 µm

Holographic

Iridescent TC

A top coated Iridescent film laminated with clear biaxially-oriented polypropylene.

- Designed for use in high end label applications such as cosmetics and home and personal care, where clarity and adhesion to HDPE, PET and glass containers are required.
- Top coated for better ink anchorage over a wide range of processes: rotary UV screen, UV letterpress, UV flexo, water flexo, and solvent gravure.

Basis Weight 83 g/m²

Thickness 78 µm



Facestock - Durables Film

Polyester (PET) - White

2M White PET TC

A homogeneously pigmented white facestock featuring excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.

- Designed for printing with most solvent, UV cured and some water-based flexographic inks.
- Suitable for thermal transfer printing applications with select thermal transfer ribbons. Specific testing is required.

Basis Weight 76 g/m²

Thickness 50 µm

Printability ★★★★

Label Dispensing ★★★★

Conformability *

Die Cutting

Opacity ★★★★

50µm Matte White PET TC

A matte white polyester facestock with a smooth, absorbent ink-receptive top coating.

- Features excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.
- Suitable for use in a wide range of durable labelling applications.

Basis Weight 60 g/m²

Thickness 50 µm

Printability ★★★★

Label Dispensing ★★★★★

Die Cutting ★★★★

Conformability ★

Opacity ★★★★

Polyester (PET) - Metalized

50μm Bright Silver PET TC

A bright metallic polyester facestock with a smooth, absorbent inkreceptive top coating.

- Suitable for a wide range of promotional labels.
- Features excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.

Basis Weight 71 g/m²

Thickness 50 µm

Label Dispensing ★★★★

Conformability *

Printability

Die Cutting

Opacity ****



Facestock - Durables Film (continued)

Polyester (PET) - Metalized (continued)

2M Matte Ch PET TC

A matte finished metallic film featuring excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.

- Designed for printing with most solvent, UV cured and some water-based flexographic inks.
- Suitable for thermal transfer printing applications with select thermal transfer ribbons.

Basis Weight 72 g/m²

Thickness 50 μm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★

Opacity

1M Matte Ch PET TC

A matte finished metallic, top coated polyester film featuring excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.

- · Designed for printing with most solvent UV cured and some water-based flexographic inks.
- Suitable for thermal transfer printing applications with select thermal transfer ribbons.

Basis Weight 35 g/m²

Thickness 25 μm

Printability ★★★★

Label Dispensing ★★★

Die Cutting ★★★★

Conformability ★★

Copy Code CH PET Plus

A matte finished metallic film featuring excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance.

- Designed for printing with most solvent, UV cured and some water-based flexographic inks.
- Suitable for use in a wide range of durable labelling applications whereby UL recognition is required.

Basis Weight 75 g/m²

Thickness 58 μm

Printability ★★★★

Label Dispensing ★★★★

Die Cutting ★★★★

Conformability ★

Polyester (PETC) White

2M WH PETC TC

A semi-gloss finished white polyester film with a smooth, absorbent ink-receptive top coating.

- Designed for printing with most solvent UV cured and some water-based flexographic inks.
- Suitable for thermal transfer printing applications with select thermal transfer ribbons.

Basis Weight 71 g/m²

Thickness 50 µm

Printability ★★★

Label Dispensing ★★★

Die Cutting ★★★

Conformability ★



Adhesives



Adhesive comparison table

									Application							Substrates								
General Purpose - Papers									drel	٠		е	73					poc						
		Initial Tack	Ultimate Adhesion	Min. App. Temp.	Service Temp.	Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Removable	Cardboard	Glass	PET	HDPE	LDPE	Indirect Food						
Permanent																								
<u>S2420</u>	Emulsion Acrylic	Ultra High	Strong	5°C	-20°C to 80°C				~				~	~	~	~	~ 、	/ /						
<u>\$2090</u>	Emulsion Acrylic	High	High	5°C	-20°C to 80°C				~				~	~	~	~	,	/ /						
<u>S2492</u>	Emulsion Acrylic	Medium	Medium	5°C	-20°C to 80°C									~	~	~	,	/ /						
<u>M3300</u>	Emulsion Acrylic	Medium	Medium	5°C	-20°C to 80°C									~	~	~	,	/ /						
<u>\$1010</u>	Emulsion Acrylic	Medium	Medium	5°C	-20°C to 80°C									~	~	~	,	/ /						
<u>\$1005</u>	Emulsion Acrylic	Fair	Fair	5°C	-20°C to 80°C									~	~	~	,	/ /						
<u>S1002</u>	Emulsion Acrylic	Fair	Fair	5°C	-20°C to 80°C									~	~	~	,	/ /						
<u>S2050N</u> ♥	Rubber-based Hotmelt	Ultra High	Strong	10°C	-40°C to 70°C				~				~	~	~	~	/ \	/ /						
<u>S2025N</u> ♥	Rubber-based Hotmelt	High	High	10°C	-40°C to 70°C				~				~	~	~	~	/ 、	/ /						

										Application						Substrates							
General Po	urpose - Films	Initial Tack	Ultimate Adhesion	Min. App. Temp.	Service Temp.	Freezer	Chilled	WetSurfaces	Tight Mandrel	Ice Bucket	Durable	Removable	Cardboard	Glass	PET	HDPE	LDPE	ЬР	Indirect Food				
Permanent																							
<u>S3000</u>	Emulsion Acrylic	High	Strong	5°C	-20°C to 80°C				~					~	~	~	~	~	~				
<u>S4700N</u> ឺំ	Emulsion Acrylic	High	Strong	5°C	-20°C to 80°C						~				~	~		~	>				
SR3013	Emulsion Acrylic	High	High	5°C	-20°C to 80°C									~	~	~	~	~	>				
<u>SR3013N</u> [∰]	Emulsion Acrylic	High	High	5°C	-20°C to 80°C									~	~	~	~	~	~				
<u>S692N</u> ₫	Emulsion Acrylic	High	High	5°C	-20°C to 80°C				~					~	~	~	~	~	>				
<u>S631</u> [⊕] ੈ	Emulsion Acrylic	High	High	5°C	-20°C to 80°C				~					~	~	~	~	~	>				
S7210	Emulsion Acrylic	High	High	5°C	-20°C to 80°C									~	~				>				
S6800	Emulsion Acrylic	High	High	5°C	-20°C to 80°C									~	~			~	>				
<u>S3010N</u> ♥	Rubber-based Hotmelt	Ultra High	High	10°C	-40°C to 70°C				~				~	~	~	~	~	~	>				



									Application							Substrates							
Special Pu	ırpose	Initial Tack	Ultimate Adhesion	Min. App. Temp.	Service Temp.	Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Removable	Cardboard	Glass	PET	HDPE	LDPE	ЬР	Indirect Food				
Permanent																							
<u>C7501</u>	Emulsion Acrylic	Medium	Medium	-40°C	-50°C to 90°C		~								~	~	~	~					
<u>C2075</u> ♡	Rubber-based Hotmelt	High	High	-20°C	-50°C to 70°C	~	~	~					~	~	~	~	~	~					
<u>C2076</u>	Rubber-based Hotmelt	High	High	-10°C	-40°C to 70°C	~	~	~					~	~	~	~	~	~					
<u>C2076C</u> ♡	Rubber-based Hotmelt	High	Medium	0°C	-40°C to 70°C		~	~					~	~	~	~	~	~	~				
<u>S2800</u>	Emulsion Acrylic	Medium	Medium	-15°C	-50°C to 80°C		~							~	~	~	~	~					
<u>rS2030MB</u> ♡	Emulsion Acrylic	High	High	5°C	-20°C to 80°C		~	~		~				~	~				~				
<u>Z3338N</u>	Emulsion Acrylic	High	High	-20°C	-50°C to 80°C		~	~		~				~	~				~				
<u>S477A.MB</u> ♡	Emulsion Acrylic	Ultra High	Strong	5°C	-20°C to 80°C				~							~	~	~	~				
WO1900	Emulsion Acrylic	Medium	Medium	5°C	-20°C to 80°C					~				~					~				
<u>S333</u>	Emulsion Acrylic	High	High	-4°C	-40°C to 145°C						~			~	~	~		~					
<u>\$369</u>	Emulsion Acrylic	Medium	High	-4°C	-40°C to 145°C						~			~	~	~		~					
<u>\$8020</u>	Emulsion Acrylic	Medium	Medium	5°C	-20°C to 80°C						~				~	~		~	~				
<u>S2060</u> ♡	Rubber-based Hotmelt	High	Strong	10°C	-40°C to 70°C						~		~	~	~	~		~	~				
<u>TS79</u>	Rubber-based Hotmelt	Ultra High	Strong	0°C	-40°C to 70°C						~		~		~	~	~	~	~				
Removable																							
<u>R423</u>	Emulsion Acrylic	Fair	Medium	-12°C	-40°C to 70°C							~	~			~	~	~	~				
<u>R450</u>	Emulsion Acrylic	Medium	Medium	-15°C	-30°C to 70°C							~	~			~	~	~	~				
<u>R480</u>	Emulsion Acrylic	Medium	Medium	-15°C	-30°C to 70°C							~	~			~	~	~	~				
																			_				



<u> Adhesive</u> – <u>General Purpose</u> – Papers

Permanent

S2420

Emulsion Acrylic

A general purpose permanent acrylic based adhesive suitable for paper reels

- Ultra-high initial tack with strong adhesive properties on a wide range of substrates.
- Suitable for low surface energy or textured substrates like HDPE or PP and textured substrates like carton box.

Initial tack Ultra High Ultimate adhesion Strong Minimum application temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Application
Freezer
Chilled
Wet Surfaces
✓ Cardboard
✓ Glass
✓ PET
✓ Tight mandrel
Ice bucket
Durable

Removable

S2090

Emulsion Acrylic

A general purpose permanent acrylic based adhesive suitable for paper reels

- · Excellent initial tack and adhesive properties.
- Good diecutting and stripping properties.
- Excellent adhesion to a wide range of substrates, e.g. HDPE, recycled corrugated cardboard and difficult substrates.
- Suitable for use on rough surfaces, such as recycled board.

Initial tack High
Ultimate adhesion High
Minimum application temperature
Service temperature -20°C to 80°C

Indirect Food

Application
Freezer
Chilled
Wet Surfaces
Vet Surfaces
Vet

S2492

Emulsion Acrylic

A general purpose permanent acrylic based adhesive

- · Good initial tack adhesive properties.
- Featuring high cohesive strength, which is necessary for LCJ applications.
- Designed to give good adhesion to plastic and paper substrates on which the mailing address label is applied.

Initial tack Medium
Ultimate adhesion Medium
Minimum application temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Application

Freezer

Chilled

Wet Surfaces

Tight mandrel

Ice bucket

Durable

Removable

Substrates

Cardboard

✓ Glass

✓ PET

✓ HDPE

LDPE

✓ PP



Adhesive - General Purpose - Papers (continued)

Permanent (continued)

M3300

Emulsion Acrylic

A general purpose permanent acrylic based adhesive for paper reels

- · Good initial tack and adhesive properties.
- Provides optimum "price-performance" factor suitable for mid-high surface energy substrates.

Initial tack Medium
Ultimate adhesion Medium
Minimum application
temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Removable

Substrates
Cardboard

✓ Glass
✓ PET

✓ HDPE
LDPE

✓ PP

S1010

Emulsion Acrylic

A general purpose permanent acrylic based adhesive for paper reels

- Good initial tack and adhesive properties on a variety of substrates.
- Exhibits low bleed characteristics.
- Good diecutting & guillotining properties.
- Demonstrates good UV resistance and aged performance.

Initial tack Medium
Ultimate adhesion Medium
Minimum application
temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Substrates
Cardboard
✓ Glass
✓ PET
✓ HDPE
LDPE
✓ PP

S1005

Emulsion Acrylic

A general purpose permanent acrylic based adhesive suitable for paper reels

- · Moderate initial tack and adhesive properties on a variety of substrates.
- Exhibits low bleed characteristics
- Good diecutting & guillotining properties.

Initial tack Fair
Ultimate adhesion Fair
Minimum application
temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Removable

Removable

ApplicationSubstratesFreezerCardboardChilled✓ GlassWet Surfaces✓ PETTight mandrel✓ HDPEIce bucketLDPEDurable✓ PP



Adhesive - General Purpose - Papers (continued)

Permanent (continued)

S1002

Emulsion Acrylic

A general purpose permanent acrylic based adhesive suitable for paper reels

- Moderate initial tack and adhesive properties on high surface energy substrates.
- · Exhibits low bleed characteristics.
- · Good diecutting and stripping properties.

Initial tack Fair
Ultimate adhesion Fair
Minimum application
temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Removable

Application

Freezer

Chilled

Wet Surfaces

Tight mandrel

Ice bucket

Durable

Substrates

Cardboard

V Glass

V PET

HDPE

LDPE

V PP

S2050N ♥

Rubber-based Hotmelt

A general purpose permanent hotmelt adhesive with superior tack and adhesion.

- Ultra-high initial tack with strong adhesive properties on a wide variety
 of substrates, including apolar, slightly rough and curved substrates.
- This adhesive is designed specifically for application at room temperature onto cardboard substrates.
- Developed to facilitate conversion speed similar to acrylic emulsion adhesives.

Initial tack Ultra High Ultimate adhesion Strong Minimum application temperature 10°C

Service temperature -40°C to 70°C

Indirect Food

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Substrates
Cardboard
Glass
FET
HDPE
LDPE
LDPE
PP

S2025N ♥

Rubber-based Hotmelt

A general purpose permanent hotmelt adhesive with superior tack and adhesion.

- Excellent initial tack and adhesive properties on a wide variety of substrates, including apolar, slightly rough and curved substrates.
- This adhesive is designed specifically for application at room temperature onto cardboard substrates.
- Developed to facilitate conversion speed similar to acrylic emulsion adhesives.

Initial tack
Ultimate adhesion
Minimum application
temperature

10°C

High

High

Service temperature

-40°C to 70°C

Indirect Food

Removable

ion Substrates

Application
Freezer
Chilled
Wet Surfaces

Tight mandrel
Ice bucket
Durable
Removable

Substrates

Cardboard

Glass

HDPE

HDPE

LDPE

PP



Adhesive - General Purpose - Films

Permanent

S3000

Emulsion Acrylic

A general purpose permanent, clear acrylic based adhesive, designed to offer excellent resistance to various liquids

- · Designed for prime labelling
- · Suitable for squeezable and clear facestock applications
- Exhibit low ooze and high temperature resistance properties
- Designed to give balanced performance between good clarity and excellent resistance to various liquids
- · Excellent resistance for baby oil applications.

Initial tack	High
Ultimate adhesion	Strong
Minimum application temperature	5°C

Service temperature -20°C to 80°C

Indirect Food

Removable

Application
Freezer
Chilled
Wet Surfaces

Tight mandrel
Ice bucket
Durable

Substrates
Cardboard

Glass

HDPE

LDPE

LDPE

V PP

S4700N

Emulsion Acrylic

A general purpose permanent, emulsion acrylic adhesive for films

- · Predominantly use in cosmetics, toiletries and luxury items.
- Also used for promotional labelling, as well as lubricant and household chemical labels where durability and resistance to moisture is required

Initial tack High
Ultimate adhesion Strong
Minimum application temperature 5°C

Service temperature -20°C to 80°C

Indirect Food •

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
✓ Durable

Substrates
Cardboard
Glass
✓ PET
✓ HDPE
LDPE
✓ PP

SR3013

Emulsion Acrylic

A dedicated adhesive suitable for recycling of PET bottles and PET containers

- Designed specifically for labelling and recycling of PET bottles and PET containers
- · Excellent clarity and "wet out" for clear filmic facestocks
- Excellent adhesion strength on PET containers until the very end of its life
 cycle, when in the sink/float process at the recycler the adhesive is deactivated
 in a caustic bath, allowing the facestock and adhesive to cleanly separate
 from the PET flakes. No residual adhesive remains on the rPET flakes

Initial tack High
Ultimate adhesion High
Minimum application
temperature 5°C

Service temperature -20°C to 80°C

Indirect Food

Removable

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Removable

Substrates

Cardboard

Glass

PET

HDPE

LDPE

PP



Adhesive - General Purpose - Films (continued)

Permanent (continued)

SR3013N

Emulsion Acrylic

A dedicated adhesive suitable for recycling of PET bottles and PET containers

- Designed specifically for labelling and recycling of PET bottles and PET containers
- Facilitating labels to be repositioned / reworked up to 8 hours
- · Excellent clarity and "wet out" for clear filmic facestocks
- Excellent adhesion strength on PET containers until the very end of its life cycle, when in the sink/float process at the recycler the adhesive is deactivated in a caustic bath, allowing the facestock and adhesive to cleanly separate from the PET flakes. No residual adhesive remains on the rPET flakes.

Initial tack High
Ultimate adhesion High
Minimum application temperature 5°C

Service temperature -20°C to 80°C

Indirect Food V

Removable

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Substrates
Cardboard
✓ Glass
✓ PET
✓ HDPE
✓ LDPE
✓ PP

S692N₫

Emulsion Acrylic

A general purpose permanent acrylic based adhesive designed for filmic facestocks

- High degree of clarity and "wet out" for clear filmic facestocks.
- Excellent initial tack and adhesive properties on a variety of substrates including apolar surfaces.
- Exhibits low bleed characteristics.
- · Good die-cutting and stripping properties.
- · Offers a wide service temperature range.
- Demonstrates good UV resistance.
- Limited resistance to plasticisers found in PVC substrates and low molecular weight oils.

Initial tack High
Ultimate adhesion High
Minimum application temperature 5°C

Service temperature -20°C to 80°C

Indirect Food 🗸

Application
Freezer
Chilled
Wet Surfaces

Tight mandrel
Ice bucket
Durable

Substrates
Cardboard

Glass

HDFE

LDPE

LDPE

V PP

S631#

Emulsion Acrylic

A dedicated adhesive suitable for beverage application

- Designed specifically to address beverage market application needs.
- · Actual application test is necessary to determine the suitability of use.

Initial tack High
Ultimate adhesion High
Minimum application
temperature 5°C

Removable

Service temperature -20°C to 80°C

Indirect Food 🗸

Application
Freezer
Chilled
Wet Surfaces

✓ Tight mandrel
Ice bucket
Durable
Removable

Substrates
Cardboard
✓ Glass
✓ PET
✓ HDPE
✓ LDPE
✓ PP



<u>Adhesive</u> – <u>General Purpose</u> – Films

Permanent (continued)

S7210®

Emulsion Acrylic

A general purpose permanent, emulsion acrylic adhesive for films

- Designed specially to address food & beverages market application on PET & Glass substrates
- A clear adhesive solution, enabling the 'no label look' when paired with clear film face
- · No adhesive oozing
- · Better converting, reduced machine downtime, keeps label dust-free
- · Short-term repositionability
- · Reduces waste from mislabelling

Initial tack	High
Ultimate adhesion	High
Minimum application temperature	5°C

Service temperature -20°C to 80°C

Indirect Food ~

Initial tack

Application

Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Removable

Substrates
Cardboard

✓ Glass
✓ PET
HDPE
LDPE
PP

S6800#

Emulsion Acrylic

A general purpose permanent, emulsion acrylic adhesive for films

• Specially formulated to provide excellent clarity on clear filmic facestocks.

Ultimate adhesion High

Minimum application temperature

Service temperature -20°C to 80°C

Indirect Food

Application Substrates
Freezer Cardboard
Chilled Glass
Wet Surfaces PET

Freezer Cardboar
Chilled ✓ Glass
Wet Surfaces ✓ PET
Tight mandrel HDPE
Ice bucket LDPE
Durable ✓ PP
Removable

High

S3010N_☉

Rubber-based Hotmelt

A general purpose permanent hotmelt adhesive with high tack and good adhesion, enabling enhanced converting performance

- Ultra-high tack with excellent adhesive properties on a wide variety of substrates, including apolar, slightly rough and curved substrates.
- · Improve convertibility by enabling higher die-cutting speed.
- Good die-cutting & stripping properties.

Initial tack	Ultra High
Ultimate adhesion	High
Minimum application temperature	10°C
Service temperature	-40°C to 70°C
Indirect Food	✓
Application	Substrates
Freezer	Cardboard
Chilled	✓ Glass
Wet Surfaces	✓ PET
. Tight mandral	. / HDDE



<u> Adhesive</u> – <u>Special Purpose</u>

Permanent

C7501

Emulsion Acrylic

A permanent, emulsion acrylic adhesive featuring excellent cold temperature performance.

- Provide good room temperature performance and excellent cold temperature performance without sacrificing good die-cutting and stripping properties.
- Features good tack and adhesion to a wide variety of packaging materials, such as paper, cardboard and films.
- Ideally suitable for labelling applications whereby application temperature is below freezing point e.g. labelling of chilled products.

Initial tack Medium
Ultimate adhesion Medium
Minimum application
temperature -40°C

Service temperature -50°C to 90°C

Indirect Food -

Application
Freezer
Cardboard
Chilled
Glass
Wet Surfaces
Tight mandrel
Ice bucket
Durable
Removable

C2075♥

Rubber-based Hotmelt

A global rubber based freezer grade permanent adhesive.

- Excellent cold temperature performance but moderate room temperature performance.
- Good adhesion performance can be achieved on slightly frosted surfaces.
- · Resistant to moisture during thawing.
- Suitable for a wide variety of packaging materials and in particular flexible films.

Initial tack High
Ultimate adhesion High
Minimum application temperature -50°C to 70°C

Indirect Food

Application

✓ Freezer

✓ Cardboard

✓ Chilled

✓ Glass

✓ Wet Surfaces

Tight mandrel
Ice bucket

Durable

Removable

Substrates

✓ Cardboard

✓ HDRE

✓ PET

✓ HDPE

✓ LDPE

✓ PP

Initial tack

C2076

Rubber-based Hotmelt

A rubber based, high tack, cold temperature adhesive.

- Excellent initial tack & adhesive strength to recycled and corrugated cardboard, for which it was developed.
- Exhibits excellent performance at lower temperatures, e.g. labelling of chilled and frozen products.

Ultimate adhesion High Minimum application -10°C temperature Service temperature -40°C to 70°C **Indirect Food Application Substrates** ✓ Freezer ✓ Cardboard ✓ Chilled ✓ Glass ✓ Wet Surfaces ✓ PET

High

✓ Chilled ✓ Glass
✓ Wet Surfaces ✓ PET
Tight mandrel ✓ HDPE
Ice bucket ✓ LDPE
Durable ✓ PP
Removable



Permanent (continued)

C2076C♥

Rubber-based Hotmelt

A rubber based, high tack, chilling temperature adhesive.

- · Suitable for use under general-purpose temperatures. Provides moisture resistance after application on a dry surface.
- · Suitable for a wide variety of substrates including apolar, slightly rough and curved surfaces and recycled board.

Initial tack High Ultimate adhesion Medium Minimum application 0°C temperature

Service temperature -40°C to 70°C

Indirect Food

Application Substrates Freezer ✓ Cardboard ✓ Chilled ✓ Glass ✓ PET ✓ Wet Surfaces Tight mandrel ✓ HDPE Ice bucket Durable

✓ LDPE ✓ PP

S2800

Emulsion Acrylic

A special purpose permanent, acrylic based adhesive for direct food contact.

- Direct food contact. complies with European food regulation 1935/2004/EC.
- · A special purpose permanent, acrylic based adhesive for direct food contact is developed to provide good room temperature performance and excellent cold temperature.
- S2800 is approved for direct food contact onto moist and fatty foods.
- · Typical applications include labels for food packaging and applications where contact with oils and greases are expected.
- · Designed for labelling cheese rinds on large cheeses and carcass labelling
- · A broad range of specialist adhesives and constructions.

Initial tack Medium Ultimate adhesion Medium Minimum application -15°C temperature

Service temperature -50°C to 80°C

Indirect Food

Removable

Application Freezer Chilled Wet Surfaces Tight mandrel Ice bucket Durable Removable

Substrates Cardboard ✓ Glass ✓ PET ✓ HDPE ✓ LDPE ✓ PP

Emulsion Acrylic

A special purpose permanent acrylic emulsion adhesive designed for the wine market

- General purpose wine adhesive exhibiting excellent adhesive performance
- · Contains a minimum of 30% renewable based resources as per Biomass Balance approach and is free of any APEO.
- The product is designed for use in the beverage industry, especially for the labelling of wine bottles when the advantages bullet of front δ back body labels and neck / shoulder labelling on the same adhesive is important.
- · Adhesive performance will be reduced if heavy embossing or foiling is applied - prior testing is strongly recommended.
- Labels must have a 3mm grain free zone measured from label edges.

Initial tack High Ultimate adhesion High Minimum application 5°C temperature

Service temperature -20°C to 80°C

Indirect Food

Application Freezer Chilled ✓ Wet Surfaces Tight mandrel ✓ Ice bucket Durable

Removable

Substrates Cardboard

✓ Glass ✓ PFT HDPF I DPF PP



Permanent (continued)

Z3338N

Emulsion Acrylic

A special purpose extra permanent acrylic based adhesive designed specifically for cold and heavy condensated applications such as sparkling wines and champagnes

- Special purpose wine adhesive engineered to perform on cold/condensated glass surfaces
- For use in difficult applications where high levels of moisture are present eg. sparkling wine δ champagne
- Offers good ice bucket performance when used with appropriate varnished facestocks
- · Effective during extended storage in refrigeration
- · Withstands variable temperature and humid environments
- · Consistent label positioning on bottle surfaces with condensation

Initial tack High Ultimate adhesion High Minimum application -20°C temperature

Service temperature -50°C to 80°C

Indirect Food

Application Freezer ✓ Chilled ✓ Wet Surfaces Tight mandrel

✓ Ice bucket Durable Removable

Substrates Cardboard

✓ Glass ✓ PET HDPF I DPF

PР

S477A.MB[⊕] **Emulsion Acrylic**

A permanent, emulsion acrylic adhesive featuring high initial tack.

- · Ultra-high initial tack with strong adhesive properties on a wide range of substrates, including low surface energy substrates like HDPE or PP
- Contains a minimum of 30% renewable based resources as per Biomass Balance approach and is free of any APEO
- · Suitable to use for freshly blow-moulded HDPE containers

Initial tack Ultra High Ultimate adhesion Strong Minimum application 5°C temperature

Service temperature -20°C to 80°C

Indirect Food

Application Freezer Chilled Wet Surfaces Tight mandrel Ice bucket

Cardboard Glass PET ✓ HDPE ✓ LDPE Durable ✓ PP Removable

WO1900₽ **Emulsion Acrylic**

A permanent emulsion acrylic adhesive, designed to exhibit excellent and residue free removal of bottle labels in industrial automatic washing

- · Specially developed adhesive for the decoration of returnable glass bottles in spirit, beer and beverage application. It facilitates excellent and residue free removal of glass bottle labels in industrial automatic washing with alkali solution.
- · Designed for excellent wet-out, converting, stripping, dispensing and caustic wash off characteristics.
- Permits residue-free removal of labels from the bottle when washed in a hot alkali solution (recommend using 2% caustic soda solution, around 80°C, washing duration 5 to 7 mins).

Initial tack Ultimate adhesion Minimum application temperature

Medium 5°C

Medium

Substrates

Service temperature -20°C to 80°C

Indirect Food

Application Freezer

Chilled Wet Surfaces Tight mandrel

✓ Ice bucket Durable Removable **Substrates** Cardboard

✓ Glass PET HDPE LDPE PР



Permanent (continued)

S333

Emulsion Acrylic

An industrial general purpose durable acrylic based adhesive for filmic facestocks

- Excellent initial tack and adhesion strength on a variety of substrates including apolar surfaces.
- · High degree of clarity and "wet out" for clear filmic facestocks.
- · Exhibits low bleed characteristics.
- · Good die-cutting and stripping properties.
- Offers a wide service temperature range include high temp durable performance.
- · Demonstrates good UV resistance.
- · Durable application adhesive

Initial tack	High
Ultimate adhesion	High
Minimum application temperature	-4°C

Service temperature -40°C to 145°C

Indirect Food

Application Substrates Freezer Cardboard Chilled ✓ Glass ✓ PET Wet Surfaces ✓ HDPE Tight mandrel LDPE Ice bucket ✓ Durable ✓ PP

Removable

S369

Emulsion Acrylic

An excellent, general purpose industrial grade clear adhesive

- · Good initial tack with excellent adhesion strength on wide variety of substrates.
- · Exhibit low bleed characteristics.
- · Excellent die-cutting and stripping properties.
- · Durables application adhesive

Initial tack Medium Ultimate adhesion High Minimum application temperature

Service temperature -40°C to 145°C

Indirect Food

Application Substrates Freezer Cardboard Chilled ✓ Glass Wet Surfaces ✓ PET Tight mandrel ✓ HDPE Ice bucket LDPE Durable ✓ PP Removable

S8020

Emulsion Acrylic

A special purpose permanent, clear acrylic based adhesive

- Featuring excellent UV resistance and weatherability together with good adhesion performance, even on apolar substrates.
- · Exhibits a balance of high cohesive strength and adhesion to low surface-energy substrates.
- · Specifically designed to exhibit excellent wet-out characteristics, good yellowing resistance, and excellent clarity.

Initial tack Medium Ultimate adhesion Medium Minimum application 5°C temperature

Service temperature -20°C to 80°C

Indirect Food

Application Substrates Freezer Cardboard Chilled Glass Wet Surfaces ✓ PET Tight mandrel ✓ HDPE Ice bucket I DPF ✓ Durable ✓ PP Removable



Permanent (continued)

S2060♥

Rubber-based Hotmelt

An excellent, high performance industrial grade adhesive

- Suitable for use in a wide range of durable labelling application which do not need extremely high temperature resistance.
- Featuring good initial tack and ultimate bond strength to a wide range of substrates.

Initial tack High
Ultimate adhesion Strong
Minimum application temperature 10°C

Service temperature -40°C to 70°C

Indirect Food 🗸

Removable

Removable

Application

Freezer

Chilled

Wet Surfaces

Tight mandrel

Ice bucket

✓ Durable

Substrates

✓ Cardboard

✓ Blass

✓ PET

✓ HDPE

LDPE

✓ PP

TS79

Rubber-based Hotmelt

A special purpose permanent, rubber based adhesive designed for demanding applications

- Specially designed to meet the demands of rough and textured surfaces, such as those in the tyre and textile industries
- · Limited conversion speeds
- The construction will have a tendency to bleed, avoid tight rewinding
- Temperature levels of 70° Celsius should not be exceeded
- Excessive exposure to sunlight may result in the degradation of the adhesive

Initial tack

Ultra High

Ultimate adhesion

Minimum application temperature

Service temperature

Jervice temperature

Service temperature

✓

Application
Freezer
Chilled
Wet Surfaces
Tight mandrel
Ice bucket

Durable

Substrates
Cardboard
Glass

PET
HDPE
LDPE

LDPE

PP



Removable

R423

Emulsion Acrylic

A paper removable adhesive featuring long term removability and excellent die-cutting and stripping characteristics

· Featuring clean removability on a wide range of substrates over long periods of time depending on several factors i.e. type and shape of substrate, temperature, exposure to UV light, etc. - preliminary testing is essential prior using

Initial tack Fair Ultimate adhesion Medium Minimum application -12°C temperature

Service temperature -40°C to 70°C

Indirect Food

✓ Removable

Removable

Application Substrates Freezer ✓ Cardboard Chilled Glass PET Wet Surfaces Tight mandrel ✓ HDPE ✓ LDPE Ice bucket ✓ PP Durable

R450

Emulsion Acrylic

A paper removable adhesive featuring excellent long term removability

- · Featuring excellent removability on a wide range of substrates over a period of time depending on type of substrates.
- Therefore, preliminary testing is essential prior using the product.

Initial tack Medium Ultimate adhesion Medium Minimum application -15°C temperature

Service temperature -30°C to 70°C

Indirect Food

Application Substrates Freezer ✓ Cardboard Chilled Glass Wet Surfaces PET Tight mandrel ✓ HDPE Ice bucket ✓ LDPE Durable ✓ PP

R480

Emulsion Acrylic

A filmic removable adhesive featuring long term removability and excellent die-cutting and stripping characteristics

- · Featuring excellent removability on a wide range of substrates over a period of time depending on type of substrates.
- Therefore, preliminary testing is essential prior using the product.

Initial tack Medium Ultimate adhesion Medium Minimum application -15°C temperature Service temperature -30°C to 70°C **Indirect Food Application Substrates** Freezer ✓ Cardboard Chilled Glass Wet Surfaces PET Tight mandrel ✓ HDPE

Removable

Ice bucket

Durable

✓ LDPE

✓ PP



Liner





Liner contents

Glassine
BG33Wh FSC ☐ ♥
BG40Wh FSC ♥
BG50Wh FSC [®]
BG33Wh FSC ™ ♥
<u>BG40Bl FSC</u> ₩
PET
PET23 [©]
<u>PET30</u>
<u>rPET23</u> ੴ
<u>rPET30</u> ♡
Kraft
CCK55
<u>rCCK80</u> ♡
CCK130
<u>B90</u>
B100



Liner – Glassine

BG33Wh FSC → A super calendered glassinated paper, available in white. • The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.	Basis Weight Thickness	50 g/m² 48 μm
BG40Wh FSC A super calendered glassinated paper, available in white. Designed for medium to high speed conversion. Good caliper consistency allows accurate kiss die cutting. The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.	Basis Weight Thickness	57 g/m² 51 μm
BG50Wh FSC A super calendered glassinated paper, available in white. Designed for medium to high speed conversion. Good caliper consistency allows accurate kiss die cutting. The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.	Basis Weight Thickness	78 g/m² 69 μm
BG33BIFSC A super calendered glassinated paper, available in blue. The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.	Basis Weight Thickness	50 g/m² 43 μm
BG40BIFSC A super calendered glassinated paper, available in blue. Designed for medium to high speed conversion. Good caliper consistency allows accurate kiss die cutting. The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.	Basis Weight Thickness	58 g/m² 51 μm

51



Liner – PET

PET23 13 **Basis Weight** 33 g/m² A clear polyester film giving optimum smoothness to the **Thickness** 23 µm adhesive layer and featuring very high strength and toughness. · For applications where highest clarity of the applied label is required i.e. the "no label look". The films high strength and uniform caliper permit very high speed conversion and dispensing. **PET30 Basis Weight** 43 g/m² A clear polyester film giving optimum smoothness to the **Thickness** 30 µm adhesive layer and featuring very high strength and toughness. • For applications where highest clarity of the applied label is required i.e. the "no label look". The films high strength and uniform caliper permit very high speed conversion and dispensing. rPET23 ₽ **Basis Weight** 33 g/m² A clear polyester film giving optimum smoothness to the **Thickness** 23 µm adhesive layer and featuring very high strength and toughness. · For applications where highest clarity of the applied label is required i.e. the "no label look". The films high strength and uniform caliper permit very high speed conversion and dispensing · Contains 30% Recycled Materials rPET30€ **Basis Weight** 43 g/m² A clear polyester film giving optimum smoothness to the **Thickness** 30 µm adhesive layer and featuring very high strength and toughness. · For applications where highest clarity of the applied label is required i.e. the "no label look". The films high strength and uniform caliper permit very high speed conversion and dispensing

· Contains 30% Recycled Materials



Liner - Kraft

CCK55

A one side clay coated kraft liner, available in white

 Features good dimensional stability. The Hygroflat liner suitable for high speed sheet fed laser printers and copiers.

· Suited for roll to sheet label conversion.

Basis Weight

55 g/m²

Thickness

58 µm

rCCK80♡

A one side clay coated kraft liner, available in white and consists of recycled content.

• Contains 5% recycled content, promote a more sustainable brand image and contribute to a circular economy.

• Features good dimensional stability, uniform thickness, toughness, and tear resistance which is required for good die-cutting in rotary and flat-bed.

• Exhibits good layflat property, which is necessary for sheets form applications, when paired with paper facestocks.

· Suited for roll to sheet label conversion

Basis Weight

80 g/m²

Thickness

80 µm

CCK130

A high strength clay-coated kraft paper.

• Features excellent dimensional stability, toughness, and tear resistance which is required for good die-cutting in rotary and flat-bed.

• Excellent layflat property, which is necessary for filmic sheets form applications

· Suited for roll to sheet label conversion

Basis Weight

130 g/m²

Thickness

130 µm

B90

A clay coated kraft liner, available in white.

 Featuring good dimensional stability and flatness during processing, combined with the resilience to support die cutting.

• Designed for excellent layflat needed in sheet products

Basis Weight

87 g/m²

Thickness

91 µm

B100

A clay coated kraft liner, available in white.

 Featuring good dimensional stability and flatness during processing, combined with resilience to support die cut.

· Designed for excellent layflat needed in sheet products

· Suitable for high quality process printing.

Basis Weight

100 g/m²

Thickness

87 µm



Product Selection Considerations

As part of our commitment to improve and innovate, these selection considerations were written to guide you through the product selection process.

Choosing the right product can be a challenge, but with Avery Dennison it's easy. Simply understand your requirements then call your local Avery Dennison representative.

1. Is the label to be permanent or removable?

- For removable labels ensure the substrate is strong enough to withstand label removal.
- b) Larger labels may require a stronger facestock to prevent tear on removal.
- c) A label is considered permanent if the bond to the substrate is substrate is impossible to remove without tearing the material.

2. What is the composition of the substrate?

- a) The composition of the substrate that the label will be applied to can have an effect on the ultimate strength of the bond that the label will form.
- On low surface energy materials, initial tack is the most important criteria.

 Adhesive levels will improve with longer dwell.

3. What is the texture of the substrate's surface?

- a) The texture of a substrate can have an impact on the formation adhesive.
- b) Textured materials do not allow 100% contact of the adhesive. Less contact means a smaller bonding area which will result in lower adhesion.
- c) Performance on heavily textured materials is improved with careful product selection.
- d) A more aggressive adhesive will maximize the adhesion at contact area.

4. What is the shape of a) the substrate?

- The shape of the substrate along with the size and stiffness of the label must be considered to ensure proper end-use performance. Curved surfaces (less than 25mm in diameter) will require an aggressive adhesive combined with a flexible facestock featuring little or no memory.
- b) Small labels or stiff facestocks may not adhere well on curved or irregular surfaces.

5. Is the application surface clean or contaminated?

- a) The cleanliness of the surface of the substrate when the label is applied will affect the ultimate adhesion of the label and the success of the application. Contamination from oil, grease, frost, dust, moisture and release agents are some causes of label failure.
- b) If contamination cannot be avoided, careful product selection can overcome the negative impact.



- 6. Are there any plasticisers present in the substrate?
- a) Plastics containing plasticisers (softeners) will degrade the adhesive bond strength and may render the label useless. Careful product selection can overcome the negative impact.
- 7. Are there any special a)
 application or
 exposure conditions
 that the label must
 withstand?
- Will the label be exposed to solvent/cleaning agents, large amounts of humidity or moisture, UV light or ozone?
 - b) What is the application temperature of the label?
 - c) Service Temperature will the label be exposed to deep freeze conditions?

- 8. What are the printing, imprinting and conversion requirements?
- Most paper facestocks are suitable for all printing methods. Non-absorbent film facestocks require different considerations.
- b) When high quality process printing is required, careful selection of the facestock will be required.
- c) When imprinting is required, good resolution and smudge resistance is important.
- d) Corona treated films effectiveness of the corona treatment reduces in time and can also be affected by abrasion or damage. To ensure optimum wettability and ink bond, additional in-line corona treatment is recommended for optimum ink keu.
- e) All dies should be proofed to the construction.
- f) Complex shaped labels and square corners may limit the conversion speed.



Avery Dennison

Label and Packaging Materials

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