Product Component Guide

ASEAN

2020

AVERY DENNISON

Contents

Welcome to the 2019 Product Component Guide. This guide provides an up-to-date listing of all core facestocks, adhesives and release liners that make up Avery Dennison pressure-sensitive label materials. These product components deliver unique features and capabilities achieved through Avery Dennison's proprietary processes, technical knowledge, resources and experience.

The products included within this guide reflect our core portfolio of products. To see our service programs for these products please refer to the Product Services Guide. Product datasheets can be sourced online at label.sapssa.averydennison.com or available through your local customer service team member. Contact your sales representative if you have any further questions.

How to Use this Guide

Facestock

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

Thickness
The thickness of the facestock in microns.

FSC® Certification
Products that are certified by the Forest Stewardship Council are marked with the FSC logo.

Adhesive

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.

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.

Liner

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

Thickness
The thickness of the facestock in microns.

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 food-certified 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 22°C +/- 2°C and a relative humidity of 50% +/- 5%.
- 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.

Facestocks

Quick Compare Guide

Prime Paper		Printability	Water Resistance	OBA	Stiffness	Tensile Strength
Cast Coated	High Gloss Paper	★★★★★	★★★	Yes	★★★★½	★★★★½
	High Gloss Elite FSC	★★★½	★★★½	Yes	★★★★½	★★★★½
Machine Coated	MC Prime FSC	★★★★½	★★★	Yes	★★★½	★★★½
	MC Primecoat GP FSC	★★★★	★★	Yes	★★★	★★★½
	MC Elite FSC	★★★★	★★★	Yes	★★½	★★★
	LW 60 FSC	★★★★	★★	Yes	★★	★★½
Vellum	Vellum	★★★	-	Yes	★★★	★★
	Vellum Elite	★★★	-	Yes	★★★	★★

Clear Films		Printability	Stiffness	Conformability
Polyethylene	PE85 Top Trans	★★★★★	★★★★	★★★★
	PE85 NTC Trans	★★★½	★★★★	★★★★
	PE75 NTC Trans	★★★½	★★★	★★★★
Polypropylene	PPNg Top Trans	★★★★★	★★★★★	★½
	PP50 TC Clear	★★★★★	★★★★★	★½
	PP50 NTC Clear	★★★½	★★★★★	★½
	PP40 Top Trans	★★★★★	★★★★	★★
	PP30 Clear TC	★★★★	★★★★	★★
	PP30 Clear NTC	★★	★★★★	★★
	Overlaminating Gloss PP	★★	★★★	★★
	Overlaminating Matte PP	★★	★★★	★★
Polyolefin	Fasclear® 250	★★★★	★★★	★★★★★
	Fasclear® 300	★★★★	★★★★	★★★★
	Global Co-Ex™ Clear NTC	★★★★	★★★	★★★
	Global MDO Clear NTC	★★★★	★★	★★★
	Flexiprint Plus NTC Tran	★★★★	★★	★★½

White Films		Printability	Stiffness	Conformability
Polyethylene	PE85 Top White	★★★★★	★★★★	★★★★
	PE85 NTC White	★★★½	★★★★	★★★★
	PE75 NTC White	★★★½	★★★★	★★★★
Polypropylene	PP Top Matte White	★★★★★	★★★★½	★★
	PPNg Top Pearlized White	★★★★★	★★★★	★★
	PP60 Top White	★★★★★	★★★★	★★
	PP50 Top White	★★★★★	★★★★	★★
	PP40 Top White	★★★★★	★★★½	★★½

Facestocks

White Films		Printability	Stiffness	Conformability
Polypropylene	PP40 Top Matte White	★★★★½	★★★½	★★½
	Opalux 65	★★★½	★★★★	★★
Polyolefin	Primax® 300	★★★★	★★★	★★★★★
	Global Co-Ex™ White NTC	★★★★	★★★	★★★
	Global MDO White NTC	★★★★	★★	★★★
	Flexiprint Plus NTC White	★★★★	★★	★★½

Metallized Films		Printability	Stiffness	Conformability
Polyethylene	Bright Silver PE85 TC	★★★★★	★★★★	★★★★
Polypropylene	PP50 Silver TC	★★★★	★★★★★	★½
	PP TC Silver Elite	★★★½	★★★★★	★½
	PP40 Top Silver	★★★★★	★★★★	★★

Variable Information Papers		Print Definition	Print Durability
Direct Thermal	Direct Thermal Premium	★★★★★	★★★
	Direct Thermal 200WS	★★★★	★★½
	Direct Thermal 200GP	★★★★	★★½
	Direct Thermal 150RL	★★★	★★
	Direct Thermal 300LD BPA-Free	★★½	★½
Thermal Transfer	Transtherm 2C	★★★★★	★★★★★
	Premium Transtherm 1C	★★★★★	★★★★★
	Transtherm Plus	★★★★	★★★★

Specialty Films		Printability	Stiffness	Conformability
Polypropylene	Synthetic Paper	★★★½	★★★½	★★
	3 Mil Synthetic Paper	★★★★	★★★½	★★
	Synthetic Paper 65	★★★½	★★★½	★★
Polyester	2M White PET TC	★★★★★	★★★★	-
	2M Matte Ch PET TC	★★★★★	★★★★	-
	1M Clear PET TC	★★★★★	★★★	-
	1M Matte Ch PET TC	★★★★★	★★★	-
	75µm Matte White PET TC	★★★★	★★★★★	-
	50µm Matte White PET TC	★★★★	★★★★	-
	50µm Bright Silver PET TC	★★★★	★★★★	-
	Copy Code CH PET Plus	★★★	★★★★	-

★★★★★ Excellent | ★★★★ Very Good | ★★★ Good | ★★ Fair | - Not Applicable

Facestocks

Prime Paper

	Basis Weight (g/m^2)	Thickness (μm)

Cast Coated

High Gloss Paper

A white, one side gloss finished cast coated paper | 80 | 88

- 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.

High Gloss Elite

An FSC® certified, white, one-side cast coated, gloss finished woodfree printing paper | 80 | 84

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

Machine Coated

MC Prime

An FSC® certified, semi-gloss, one side machine coated, calendered white printing paper | 80 | 70

- 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.

MC Primecoat GP

An FSC® certified, semi-gloss, machine coated, calendered white printing paper | 80 | 63

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

MC Elite

An FSC® certified, semi-gloss, machine coated, calendered white printing paper | 70 | 61

- 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.

LW 60

An FSC® certified, semi-gloss, one side machine coated, calendered white printing paper | 60 | 52

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

Vellum

Vellum

A white, machine finished, woodfree-printing paper | 70 | 90

- 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.

Vellum Elite

A white, machine finished, woodfree-printing paper | 60 | 78

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

Facestocks

Prime Film

	Basis Weight (g/m^2)	Thickness (μm)

Polyethylene (PE) - Clear

PE85 Top Trans

A blown co-extruded, transparent polyethylene film with a print receptive top coating | 78 | 82

- 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.

PE85 NTC Trans

A blown co-extruded, corona-treated transparent polyethylene film | 77 | 82

- 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.

PE75 NTC Trans

A blown co-extruded, corona-treated transparent polyethylene film | 70 | 75

- 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.

Polyethylene (PE) - White

PE85 Top White

A blown co-extruded, white polyethylene film with a print receptive top coating | 83 | 82

- 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.

PE85 NTC White

A blown co-extruded, corona-treated white polyethylene film | 82 | 82

- 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.

PE75 NTC White

A blown co-extruded, corona-treated white polyethylene film | 74 | 75

- 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.

Facestocks

Prime Film

	Basis Weight (g/m^2)	Thickness (μm)

Polyethylene (PE) - Metalized

Bright Silver PE85 TC

A bright metallic polyethylene film with a print receptive top coating on the metallised surface | 78 | 85

- 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.

PPNg Top Trans

A bi-axially oriented, glossy transparent polypropylene film with a print-receptive top coating | 46 | 50

- Applications include labeling of quality products such as cosmetics, toiletries, luxury articles and promotional labeling as well as automotive lubricants and household chemicals requiring durability and resistance to moisture or chemicals.
- Ideal for applications requiring 'substrate identical labeling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Due to semi-rigid nature of polypropylene, care should be taken with 'non-uniform' surfaces or highly squeezable applications.

PP50 TC Clear

A bi-axially oriented, glossy transparent polypropylene film with a print-receptive top coating | 46 | 50

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labeling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Not suitable for application where re-positionability is required.
- 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.

PP50 NTC Clear

A biaxially oriented, glossy transparent polypropylene film with corona-treated print skin layer | 45 | 50

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labeling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs.
- Not suitable for application where re-positionability is required.
- 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.

PP40 Top Clear

A bi-axially oriented, glossy transparent polypropylene film with a print-receptive top coating | 37 | 40

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required.
- Ideal for applications requiring 'substrate identical labeling' 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.

Facestocks

Prime Film

Polypropylene (PP) - Clear

PP30 Clear TC

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

Basis Weight (g/m2): 27 | Thickness (µm): 30

- Ideal for daily, food and household product packaging.
- Ideal for applications requiring 'substrate identical labeling' 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.

PP30 Clear NTC

A biaxially oriented, glossy transparent corona treated polypropylene film

Basis Weight (g/m2): 27 | Thickness (µm): 30

- Ideal for daily, food and household product packaging.
- Ideal for applications requiring 'substrate identical labeling' 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.

Overlaminating Gloss PP

A bi-axially oriented, glossy transparent polypropylene film

Basis Weight (g/m2): 18 | Thickness (µm): 20

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

Overlaminating Matte PP

A bi-axially oriented, matte transparent polypropylene film

Basis Weight (g/m2): 17 | Thickness (µm): 20

- 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.

Polypropylene (PP) - White

PP Top Matte White

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

Basis Weight (g/m2): 54 | Thickness (µm): 75

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, 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 labeling' 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.

PPNg Top Pearlized White

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

Basis Weight (g/m2): 45 | Thickness (µm): 60

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, 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 labeling' 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.

Facestocks

Prime Film

Polypropylene (PP) - White

	Basis Weight (g/m^2)	Thickness (μm)
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 labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required. ▸ Ideal for applications requiring 'substrate identical labeling' 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.	44	60
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 labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required. ▸ Ideal for applications requiring 'substrate identical labeling' 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.	50	50
PP40 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 labeling, automotive lubricants and household chemicals where durability and resistance to moisture or chemicals are required. ▸ Ideal for applications requiring 'substrate identical labeling' 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.	40	40
PP40 Top Matte White **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 labeling' 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.	28	38
Opalux 55 **A gloss white, corona treated BOPP NTC cavitated film** ▸ Applications include labeling of quality products such as cosmetics, toiletries, luxury articles and promotional labeling as well as automotive lubricants and household chemicals requiring durability and resistance to moisture or chemicals. ▸ Ideal for applications requiring 'substrate identical labeling' on polypropylene containers and in environmentally sensitive markets requiring recycling of 'polyolefin' packs. ▸ Due to semi-rigid nature of polypropylene care should be taken with 'non-uniform' surfaces or highly squeezable applications.	39	56

Polypropylene (PP) - Metalized

PP50 Silver TC **A bi-axially oriented, glossy bright metallised 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 labeling, 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 labeling' 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.	47	50

Facestocks

Prime Film

	Basis Weight (g/m^2)	Thickness (μm)

Polypropylene (PP) - Metalized

PP TC Silver Elite

A bi-axially oriented, glossy bright metallised polypropylene film with a print-receptive top coating | 41 | 47

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, 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 labeling' 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.

PP40 Top Silver

A bi-axially oriented, glossy bright metallised polypropylene film with a print-receptive top coating | 36 | 40

- Applications are predominantly in market segments where rigid containers are used.
- Suitable for labelling of quality products such as cosmetics, toiletries, luxury articles, promotional labeling, 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 labeling' 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.

Machine Direction Oriented (MDO) - Clear

Fasclear® 250

A corona-treated, flexible, matte transparent polyolefin film with exceptional dimensional stability | 62 | 63

- Applications are predominately in home and personal care, requiring excellent shelf appeal and consistent product performance during automatic label application.
- The film is specially engineered to give good balance between machine direction rigidity and cross direction squeezability.
- The matte transparent finishing allow the label to blend well onto any matte plastic containers, offering the "no-label" look.
- A layer of vanish can be applied to achieve a glossy look.
- Can be used for applications where PVC labels are not wanted for environmental reasons.
- Can be printed via thermal transfer when matched with the correct ribbon.

Fasclear® 300

A corona-treated, flexible, matte transparent polyolefin film with exceptional dimensional stability | 72 | 76

- Applications are predominately in home and personal care, requiring excellent shelf appeal and consistent product performance during automatic label application.
- The film is specially engineered to give good balance between machine direction rigidity and cross direction squeezability.
- The matte transparent finishing allow the label to blend well onto any matte plastic containers, offering the "no-label" look.
- A layer of vanish can be applied to achieve a glossy look.
- Can be used for applications where PVC labels are not wanted for environmental reasons.
- Can be printed via thermal transfer when matched with the correct ribbon.

Global Co-Ex™ Clear NTC

A corona-treated, flexible, co-extruded clear polyolefin film | 61 | 63

- Has a machine direction orientation (MDO) which offers exceptional dimensional stability and cross directional conformability.
- Globally available and designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Facestocks

Prime Film

Machine Direction Oriented (MDO) - Clear

Global MDO Clear NTC

	Basis Weight (g/m2)	Thickness (µm)
A corona-treated, flexible, co-extruded clear polyolefin film	46	50

- Has a machine direction orientation (MDO) which offers exceptional dimensional stability and cross directional conformability.
- Globally available and designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Flexiprint Plus NTC Trans

A co-extruded, flexible, corona-treated clear polyolefin film	44	50

- Designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Machine Direction Oriented (MDO) - White

Primax® 300

A corona-treated, flexible, white opaque polyolefin film with exceptional dimensional stability	80	76

- AApplications are predominately in home and personal care, requiring excellent shelf appeal and consistent product performance during automatic label application.
- The film is specially engineered to give good balance between machine direction rigidity and cross direction squeezability.
- The matte white finishing allow the label to blend well onto any matte plastic containers, offering the “no-label” look.
- A layer of vanish can be applied to achieve a glossy look.
- Can be used for applications where PVC labels are not wanted for environmental reasons.
- Can be printed via thermal transfer when matched with the correct ribbon.

Global Co-Ex™ White NTC

A corona-treated, flexible, co-extruded white polyolefin film	64	63

- Has a machine direction orientation (MDO) which offers exceptional dimensional stability and cross directional conformability.
- Globally available and designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Global MDO White NTC

A corona-treated, flexible, co-extruded white polyolefin film	51	50

- Has a machine direction orientation (MDO) which offers exceptional dimensional stability and cross directional conformability.
- Globally available and designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Flexiprint Plus NTC White

A co-extruded, flexible, corona-treated white polyolefin film	46	50

- Designed for the prime label market.
- Applications are predominantly in home and personal care, suitable for labelling of quality products such as cosmetics and toiletries, where shelf appeal, conformability and strong adhesion to HDPE and PET containers are required.
- Recommended for markets that require the recycling of polyolefin containers.

Facestocks

VI Paper

Direct Thermal

	Basis Weight (g/m^2)	Thickness (μm)
Direct Thermal Premium **An FSC® certified, smooth, bright, white woodfree paper with a barrier coated thermosensitive layer which 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. ▸ Exposure to sunshine or above 50°C should be avoided.	74	77
Direct Thermal 200GP **An FSC® certified, smooth, white woodfree paper with a barrier coated thermosensitive layer suitable for direct thermal barcode applications** ▸ 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. ▸ Exposure to sunshine or above 50°C should be avoided.	76	80
Direct Thermal 200WS **An FSC® certified, smooth, white matte paper with a barrier coated thermosensitive layer suitable for weigh scale applications** ▸ Suitable for general purpose barcode labeling for retail and weight scale printing with medium to low speed barcode thermal printing. ▸ Exposure to sunshine or above 50°C should be avoided.	67	70
Direct Thermal 150RL **An FSC® certified, white woodfree paper with a barrier-coated thermo-sensitive layer, designed for use in thermal printing** ▸ Suitable for barcode labelling where the environment is dry and label life cycle is short e.g. weigh scale printing, pre-packed food in dry environments. ▸ Exposure to sunshine or above 50°C should be avoided.	73	74
Direct Thermal 300LD BPA-Free **An FSC® certified, BPA-free, white, woodfree paper with a thermo-sensitive layer** ▸ Suitable 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. ▸ Exposure to sunshine or above 50°C should be avoided.	72	79
Baggage Tag 2 **An FSC® certified, smooth, bright, white woodfree paper with heat sensitive coating which is over topcoated with ink receptive and protective layer** ▸ It is laminated with special BOPP film featuring very good tear resistance. ▸ Designed for use in direct thermal printing systems at various printing speeds. ▸ Ideal application is labels for airport baggage tag thermal printing systems. ▸ The ink receptive and protective layer features very good resistance to moisture, abrasion, etc., which the baggage tag might contact to during transportation.	117	115
Baggage Tag Elite **An FSC® certified, white woodfree paper with a barrier-coated thermo-sensitive layer** ▸ The heat sensitive paper is laminated with special BOPP film featuring very good tear resistance. ▸ Designed for use in direct thermal printing systems at various printing speeds. ▸ Ideal application is labels for airport baggage tag thermal printing systems. ▸ The ink receptive and protective layer features very good resistance to moisture, abrasion, etc., which the baggage tag might contact to during transportation.	115	118

Facestocks

VI Paper

	Basis Weight (g/m2)	Thickness (µm)

Thermal Transfer

Transtherm 2C

An FSC® certified, bright white, ultra-smooth coated facestock offering high thermal transfer printing quality and smudge resistance in slow to high speed printers, ideal for high density bar code applications

81 | 89

- Designed for high quality barcode printing. Compatibility with a wide range of wax and wax-resin thermal transfer ribbons. Excellent smudge resistance.
- Applications include address, identification, tracking, and shipping labels for offices, industrial as well as retail.
- The print quality of the thermal transfer system depends on the correct match of thermal transfer ribbon, printer and printing surface, therefore, careful selection of thermal transfer ribbon and preliminary testing is essential.

Premium Transtherm 1C

An FSC® certified, bright white, ultra smooth coated facestock offering premium thermal transfer printing in slow to high speed printers

81 | 89

- Specially designed to achieve optimum performance for thermal transfer printing applications.
- Suitable to be use where moderate density of barcode printing is required.
- Applications include address, identification, tracking, and shipping labels for offices, industrial as well as retail.
- The print quality of the thermal transfer system depends on the correct match of thermal transfer ribbon, printer and printing surface, therefore, careful selection of thermal transfer ribbon and preliminary testing is essential.

Transtherm Plus

An FSC® certified, bright matte white, pigmented woodfree printing paper, specially designed for use in thermal transfer printers running at slow to high speed

62 | 66

- Applications include address, identification, tracking, and shipping labels for offices, industrial and retail.
- The print quality of the thermal transfer system depends on the correct match of thermal transfer ribbon, printer and printing surface, therefore, careful selection of thermal transfer ribbon and preliminary testing is essential.

Laser/Inkjet Paper

LCJ Premium

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

64 | 74

- The paper is based on ECF pulp.
- 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.

VI Film

	Basis Weight (g/m2)	Thickness (µm)

Direct Thermal

Baggage Tag 300BA

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

70 | 85

- Designed for use in direct thermal printing systems at various printing speeds.
- Ideal application as labels for airport baggage tag thermal printing systems.
- The 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 300BL

A white BOPP film with a barrier-coated thermosensitive layer

70 | 85

- Designed for use in direct thermal printing systems at various printing speeds where image resistance is required.
- 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.
- Suitable for applicaitons where additional durability including smudge and moisture resistance is required.

Facestocks

Specialty Paper

	Basis Weight (g/m2)	Thickness (µm)

Foil

Matte Silver Foil

A top coated aluminium foil, laminated to a white woodfree printing paper, with a matte silver finish — 80 — 65

- Designed to provide metalized appearance which is ideal for primary labeling 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

A top coated aluminium foil, laminated to a white woodfree printing paper, with a bright silver finish — 80 — 65

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

Radiants

PET Iridescent

Top coated Iridescent film laminated with clear biaxially-oriented polypropylene — 61 — 57

- Designed to provide holographic effect which is ideally for primary labelling of premium goods such as cosmetics or promotional labels.

Radiants Range

A one side fluorescent coated, woodfree printing paper, available in yellow, orange, red, pink, green — 78 — 73

- 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

An FSC® certified, 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 — 130

- Primary labeling 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.

Estate #4 PE

An FSC® certified, white vellum uncoated paper facestock featuring wet strength properties and a new generation extruded film under-laminate — 109 — 139

- Primary labeling 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.

Estate #8 PE

An FSC® certified, white vellum uncoated paper facestock featuring wet strength properties and a new generation extruded film under-laminate — 114 — 140

- Primary labeling 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.

Facestocks

Specialty Film

Synthetic Paper

	Basis Weight (g/m^2)	Thickness (μm)
Synthetic Paper TR75 **A matte white, high opacity polypropylene film suitable for flexographic, letterpress, screen and thermal transfer printing** ▸ Features high strength and durability as well as good moisture and chemical resistance. ▸ Gives printing performance in thermal transfer printing as well as conventional printing techniques. ▸ Can be printed well with flexographic and letterpress. ▸ Can also be printed with thermal transfer when matched with the correct ribbon.	59	75
Synthetic Paper **A matte white, high opacity polypropylene film suitable for flexographic, letterpress, screen and thermal transfer printing** ▸ Features 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 labeling applications whereby UL recognition (Indoor Service) is required.	68	75
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 labeling of quality products such as cosmetics, toiletries, luxury articles and promotional labeling 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.	62	78
3 Mil Synthetic Paper **A bi-axially oriented, matte white polypropylene film with a print receptive top coating, with good durability** ▸ Gives excellent printing performance in thermal transfer printing as well as conventional printing techniques. ▸ Can be printed well with flexographic, letterpress and screen printing techniques. ▸ Can also be printed with thermal transfer when matched with the correct ribbon. ▸ Therefore, careful selection of ribbon and preliminary testing is essential. In case solvent screen inks are used, please consult your ink manufacturer. ▸ Suitable for conventional and thermal transfer printing.	59	75
Synthetic Paper 65 **A matte white, high opacity polypropylene film suitable for conventional and thermal transfer printing** ▸ Features durability and good moisture resistance ▸ Facestock can be printed with conventional printing techniques. ▸ Gives excellent thermal transfer printing performance when matched with the correct ribbon and print setting. ▸ High strength and good moisture resistance. ▸ 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. ▸ Suitable for use in a wide range of durable labeling applications.	51	65

Facestocks

Specialty Film

	Basis Weight (g/m^2)	Thickness (μm)

Polyester (PET) - Clear

1M Clear PET TC

A top coated, glossy and highly transparent overlaminating film | 33 | 25

- Featuring excellent tear strength, heat resistance, dimensional stability and chemical resistance.

Polyester (PET) - White

2M White PET TC

A homogeneously pigmented white facestock | 76 | 50

- Features 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.

75µm Matte White PET TC

A matte white polyester facestock with a smooth, absorbent ink-receptive top coating | 84 | 75

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

50µm Matte White PET TC

A matte white polyester facestock with a smooth, absorbent ink-receptive top coating | 60 | 50

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

Polyester (PET) - Metalized

50µm Bright Silver PET TC

A bright metallic polyester facestock with a smooth, absorbent ink-receptive top coating | 71 | 50

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

2M Matte Ch PET TC

A matte finished metallic film | 72 | 50

- Features 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.

1M Matte Ch PET TC

A matte finished metallic, top coated polyester film | 35 | 25

- Features 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.

Copy Code CH PET Plus

A matte finished metallic film | 75 | 58

- Features 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 labeling applications whereby UL recognition is required.

Adhesives

General Purpose Adhesives — Paper

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
Permanent																	
S1002 Emulsion Acrylic **A general purpose permanent acrylic based adhesive suitable for paper reels** ▸ Good adhesion to high surface energy substrates. ▸ Exhibits low bleed characteristics. ▸ Good diecutting and stripping properties.	•	•	5	-20 to 80								✓	✓	✓		✓	✓
S1005 Emulsion Acrylic **A general purpose permanent acrylic based adhesive suitable for paper reels** ▸ Good initial tack and adhesion on a variety of substrates. ▸ Exhibits low bleed characteristics ▸ Good diecutting & guillotining properties.	••	••	5	-20 to 80								✓	✓	✓		✓	✓
S1010 Emulsion Acrylic **A general purpose permanent acrylic based adhesive for paper reels** ▸ Excellent initial tack and adhesion on a variety of substrates. ▸ Exhibits low bleed characteristics. ▸ Good diecutting & guillotining properties. ▸ Demonstrates good UV resistance and aged performance.	•••	•••	5	-20 to 80								✓	✓	✓		✓	✓
M3000 Emulsion Acrylic **A general purpose permanent acrylic based adhesive for paper reels** ▸ Provides optimum “price-performance” factor suitable for mid-high surface energy substrates. ▸ Recommended for paper products with kraft liner.	•••	•••	5	-20 to 80								✓	✓	✓		✓	✓
M3300 Emulsion Acrylic **A general purpose permanent acrylic based adhesive for paper reels** ▸ Provides optimum “price-performance” factor suitable for mid-high surface energy substrates.	•••	•••	5	-20 to 80								✓	✓	✓		✓	✓
S2492 Emulsion Acrylic **A general purpose permanent acrylic based adhesive** ▸ 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.	•••	•••	5	-20 to 80								✓	✓	✓		✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Adhesives

General Purpose Adhesives — Paper

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
Permanent																	
S2090 Emulsion Acrylic **A general purpose permanent acrylic based adhesive suitable for paper reels** ▸ High initial tack with excellent adhesion 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.	●●●●●	●●●●●	5	-20 to 80				✓			✓	✓	✓	✓		✓	✓
S2420 Emulsion Acrylic **A general purpose permanent acrylic based adhesive suitable for paper reels** ▸ Featuring ultra-high initial tack with excellent adhesion 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.	●●●●●	●●●●●	5	-20 to 80				✓			✓	✓	✓	✓	✓	✓	✓
S2025N Rubber-based Hotmelt **A general purpose permanent hotmelt adhesive with superior tack and adhesion** ▸ Excellent tack and adhesion 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 higher conversion speed - similar to acrylic emulsion adhesives.	●●●●●	●●●●●	0	-40 to 70					✓		✓	✓	✓	✓		✓	✓
Removable																	
R423 Emulsion Acrylic **A 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 to use	●●●●●	●●●●●	-12	-40 to 70							✓			✓	✓	✓	✓
R450 Emulsion Acrylic **A 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.	●●●●●	●●●●●	-15	-30 to 70							✓			✓	✓	✓	✓

●●●●● Excellent | ●●●● Very Good | ●●● Quite Good | ●● Good | ● Fair

Adhesives

General Purpose Adhesives — Film

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
Permanent																	
S6800 Emulsion Acrylic **A general purpose permanent, emulsion acrylic adhesive for films** ▸ Specially formulated to provide excellent clarity on clear filmic facestocks.	••	•••	5	-20 to 80								✓	✓			✓	✓
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. ▸ Good initial tack and adhesion 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.	•••	•••	5	-20 to 80				✓				✓	✓	✓	✓	✓	✓
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.	•••	•••	5	-20 to 80					✓				✓	✓		✓	✓
S3000 Emulsion Acrylic **A general purpose permanent, clear acrylic based adhesive** ▸ Designed for prime labeling. ▸ 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.	•••	•••	5	-20 to 80				✓				✓	✓	✓	✓	✓	✓
S2025N Rubber-based Hotmelt **A general purpose permanent hotmelt adhesive with superior tack and adhesion** ▸ Excellent tack and adhesion 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 higher conversion speed - similar to acrylic emulsion adhesives.	•••	•••	0	-40 to 70					✓		✓	✓	✓	✓		✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Adhesives

General Purpose Adhesives — Film

Comparison Table

	Initial Tack	Ultimate Adhesion	Min. app. temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
Removable																	
R480 Emulsion Acrylic **A removable adhesive featuring long term removability and excellent die-cutting and stripping characteristicss** ▸ 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.	••	••	-15	-30 to 70							✓			✓	✓	✓	✓

Special Purpose Adhesives

Comparison Table

	Initial Tack	Ultimate Adhesion	Min. app. temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
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.	•••	•••	5	-20 to 80				✓				✓	✓	✓	✓	✓	✓
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 labeling applications whereby application temperature is below freezing point e.g. labeling of chilled products.	•••	•••	-40	-50 to 90		✓					✓	✓	✓	✓	✓	✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Adhesives

Special Purpose Adhesives

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Chilled	Wet Surfaces	Tight Mandrel	Ice Bucket	Durable	Substrate: Cardboard	Glass	PET	HDPE	LDPE	PP	Food: FDA Indirect Food Contact (175.105)
AT20 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 labeling applications whereby application temperature is below freezing point e.g., labeling of chilled products.	••	••	-20	-50 to 90	✓	✓					✓	✓	✓	✓	✓	✓	✓
C2075 Emulsion Acrylic **A global rubber based freezer grade permanent adhesive** ▸ Excellent cold temperature performance but moderate room temperature performance. ▸ Good adhesion perfromance 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.	•••	•••	-20	-50 to 70	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓
S333 Emulsion Acrylic **An industrial general purpose durable acrylic based adhesive for filmic facestocks** ▸ High degree of clarity and “wet out” for clear filmic facestocks ▸ Good initial tack and adhesion on a variety of substrates including apolar surfaces. ▸ Exhibits low bleed characteristics. ▸ Good die-cutting and stripping properties. ▸ Offers a wide service temperature range include high temp duarable performance. ▸ Demonstrates good UV resistance. ▸ Durable application adhesive.	•••	•••	-4	-40 to 145						✓			✓	✓		✓	✓
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.	•••	•••	5	-20 to 80						✓			✓	✓		✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Adhesives

Special Purpose Adhesives

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Applications: Chilled	Applications: Wet Surfaces	Applications: Tight Mandrel	Applications: Ice Bucket	Applications: Durable	Substrate: Cardboard	Substrate: Glass	Substrate: PET	Substrate: HDPE	Substrate: LDPE	Substrate: PP	Food: FDA Indirect Food Contact (175.105)
S2060 Rubber-based Hotmelt **An excellent, high performance industrial grade adhesive** ▸ Suitable for use in a wide range of durable labeling application which do not need extremely high temperature resistance. ▸ Featuring good initial tack and ultimate bond strength to a wide range of substrates.	•••••	•••••	0	-40 to 70						✓	✓	✓	✓	✓		✓	✓
S2059 Rubber-based Hotmelt **A specialty permanent rubber based adhesive suitable for demanding applications** ▸ Specially designed to meet the demands of rough and textured surfaces. ▸ Limited conversion speeds. ▸ The construction will have a tendency to bleed, so therefore avoid tight rewinding. ▸ Temperature levels of 50 degree celsius should not be exceeded. ▸ Excessive exposure to sunlight may also result in degradation of the adhesive.	•••••	•••••	5	-40 to 70				✓			✓	✓	✓	✓	✓	✓	✓
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.	•••••	•••••	0	-40 to 70						✓	✓		✓	✓	✓	✓	✓
WLP Emulsion Acrylic **A special purpose permanent acrylic emulsion adhesive designed for the wine market** ▸ General purpose wine adhesive exhibiting excellent adhesive performance. ▸ Offers good ice bucket performance when used with appropriate varnished facestocks. ▸ Effective during extended storage in refrigeration. ▸ Good die-cutting amd stripping properties. ▸ Exhibits low bleed characteristics. ▸ 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.	•••••	•••••	5	-20 to 70		✓			✓			✓	✓	✓		✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Adhesives

Special Purpose Adhesives

Comparison Table

	Initial Tack	Ultimate Adhesion	Min.app.temp.(°C)	Service temp.(°C)	Applications: Freezer	Applications: Chilled	Applications: Wet Surfaces	Applications: Tight Mandrel	Applications: Ice Bucket	Applications: Durable	Substrate: Cardboard	Substrate: Glass	Substrate: PET	Substrate: HDPE	Substrate: LDPE	Substrate: PP	Food: FDA Indirect Food Contact (175.105)
WLK202 Emulsion Acrylic **A special purpose extra permanent acrylic based adhesive designed specifically for demanding wine label applications** ▸ Special purpose aggressive wine adhesive exhibiting excellent adhesive performance. ▸ For use in difficult applications where moderate levels of moisture are present, e.g., sparkling wine. ▸ Offers good ice bucket performance when used with appropriate varnished facestocks. ▸ Effective during extended storage in refrigeration ▸ Suitable for neck labelling applications when matchd with low memory facestocks. ▸ 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. ▸ Where high levels of moisture are present it is recommended in-line air blowers are used prior to application. ▸ The construction will have a tendency to bleed, so therefore avoid tight rewinding.	••••	••••	-5	-30 to 70		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
S2030 Emulsion Acrylic **A special purpose permanent acrylic emulsion adhesive designed for the wine market** ▸ General purpose wine adhesive exhibiting excellent adhesive performance. ▸ The product is designed for use in the beverage industry, especially for the labelling of wine bottles when the advantages of front & 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.	••••	••••	5	-20 to 80	✓				✓			✓	✓				✓
Z3338 Emulsion Acrylic **A special purpose extra permanent acrylic based adhesive designed specifically for 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, e.g., sparkling wine & champagne. ▸ Offers good ice biucket 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.	••••	••••	-29	-53 to 93		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓

••••• Excellent | •••• Very Good | ••• Quite Good | •• Good | • Fair

Liners

	Basis Weight (g/m^2)	Thickness (μm)

Glassine

BG33Wh

A super calendered glassinated paper, available in white — 50 — 48

- The paper's translucent properties are perfectly suited to automatic label applicators and is particularly suitable for products in reels.

BG40Wh

A super calendered glassinated paper, available in whit — 58 — 51

- 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.

BG50Wh

A super calendered glassinated paper, available in white — 78 — 69

- 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.

BG40Bl

A super calendered glassinated paper, available in blue — 58 — 51

- 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.

PET

PET23

A clear polyester film — 33 — 23

- Features optimum smoothness to the adhesive layer and very high strength and toughness.
- For applications where highest clarity of the applied label is required. High strength and uniform caliper permit very high speed conversion and dispensing.

PET30

A clear polyester film — 43 — 30

- Features optimum smoothness to the adhesive layer and very high strength and toughness.
- For applications where highest clarity of the applied label is required. High strength and uniform caliper permit very high speed conversion and dispensing.

Kraft

CCK55

A one side clay coated kraft liner, available in white — 55 — 58

- Features good dimensional stability. The Hygroflat liner suitable for high speed sheet fed laser printers and copiers. Suited for roll to sheet label conversion.

CCK80

A one side clay coated kraft liner, available in white — 80 — 80

- Features good dimensional stability, uniform thickness, toughness, tear resistance, and layflat.

CCK130

A high strength clay coated kraft paper — 130 — 130

- Features good dimensional stability, toughness, tear resistance and layflat.

B90

A clay coated kraft liner for sheet products — 87 — 91

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

B100

A clay coated raft liner for sheet products — 100 — 87

- Features good dimensional stability and flatness during processing, combined with resilience to support die cutting.
- Suitable for high quality process printing.

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?
a) 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.
b) 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 the substrate?
a) 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 application or exposure conditions that the label must withstand?
a) 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?
a) 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 key.
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

Indonesia
Kawasan Industri Jababeka
Tahap 7 Blok B No 5,
Desa Wangunharja, Kecamatan Cikarang Utara,
Kabupaten Bekasi 17550

Malaysia
No. 37 & 38, Jalan P4/6 Section 4,
Bandar Teknologi Kajang,
43500 Semenyih Selangor

Philippines
Unit 2925
L29 Joy Nostalg Center 17 ADB Avenue
Ortigas Center
Pasig Center 1600

Singapore
5B, Toh Guan Road East
#05-03, 608829

Thailand
110/1 Moo 1 Tumbol Srisajorakhe Yai
Amphur Bangsaothong
Samutprakarn 10570

Vietnam
Lot I-11, CN13 Road Industrial Group 1
Tan Binh Industrial Park Ward Son Ky
Tan Phu District
Ho Chi Minh City

AVERY DENNISON

label.sapssa.averydennison.com