FlexPak Product Matrix

AVERY DENNISON

	Flexible Packaging Overlaminates	Flexible Packaging Components
	48 Gauge Ultra Clear PET Spec# 78792	White Single-Ply Snack Web 170 Spec# 78806
Structure		
Description	48 Gauge Ultra Clear polyester film treated one side for ink adhesion. Specifically designed for print surface on laminations	1.7 mil white opaque, coextruded, biaxially oriented polypropylene film. Sealable one side. Treated one side
Construction	Single Ply	Single layer
Total Construction Caliper	.47 mils	1.7 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Print Treated One Side - Flexo UV and Water Base	Treated one side - requires corona treat prior to printing. Flexo - Water Base and Solvent.
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Excellent	Excellent
Stiffness/Flexibility	Good	Good
Tear Resistance (grams-force)	Not Tested	Not Tested
Barrier Layer Performance Properties		
Chemical Resistance	Limited	Limited
Light	N/A	Good
Moisture Vapor Transmission Rate	3.7 grams/m2 / day	.27 grams/100 sq. in./day
Odor	Fair	Fair
Oxygen Transmission Rate	9.1 cc / 100 sq in / day	100-120 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	N/A	N/A
Hot Tack	N/A	Good
Coefficient of Friction	0.35 (Kinetic)	.35 Kinetic/Print Side
Puncture Resistance	N/A	Not Tested
Seal Initiation Temperature	N/A	200°F
Seal Strength	N/A	Seal to Seal: 400 (g/in) @ 230°F/ 20 PSI/0.5 sec.
Seal through Contamination	N/A	Poor
Mullen Burst Strength	N/A	Not Tested
Material Strengths	Can be reverse printed and laminated to flexible packaging structures to add dimensional stability or used as an ultra clear press applied overlam	Stand alone it is designed for horizontal filling machines. As a sealant film in lamination it can be vertically filled. Excellent opacity and low temperature sealing.
Packaging Applications		
Compliance	21 CFR 177.1630	FDA regulation 21 CFR 177.1520
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	No
Liquids	Yes	Not recommended
End-Use Applications	Film is specifically designed to be a top layer on a flexible packaging lamination. May be printed or used as true laminate. Must be wet-laminated on press.	Horizontal packaging of snacks, baked goods and ice cream novelties. Inner sealing web of laminations for vertical packaging.

Flexible Packaging Film/Film Laminations

White Multi-Ply Snack Web 260 SB Spec# 79122	White Multi-Ply Snack Web 260 HB Spec# 79123
PET face laminated to white PE film	PET face laminated to white EVOH/m LLDPE film
48 ga. PET/adh/2 Mil White LLDPE	48 ga. PET/adh/2 Mil White EVOH/mLLDPE film
2.6 mils	2.6 mils
Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging Film Inks - Contact Ink Supplier
Excellent	Excellent
Good	Good
Average	Average
Not Tested	Not Tested
Average	Average
Good	Good
0.45 grams/100 sq. in./day	0.31 grams/100 sq. in./day
Average	Average
9.0 cc./100 sq. in./day	.05 cc./100 sq. in./day
Good	Good
Good	Good
0.25 (Kinetic, seal to seal)	0.25 (Kinetic, seal to seal)
Not Tested	Not Tested
300°F	300°F
300°F/ 20 PSI/ 1.0 sec.	300°F/ 20 PSI/ 1.0 sec.
Good	Good
Not Tested	Not Tested
Good Opacity and OTR barrier properties (without saran), good MVTR, and hermetic seals for extended shelf life.	Good Opacity with EVOH provides excellent OTR barrier properties, good MVTR and hermetic seals for extended shelf life
21 CFR 177.1520 and/or 21 CFR 177.1350, 21 CFR 177.1330	21 CFR 177.1520 and/or 21 CFR 177.1350, 21 CFR 177.1330
Yes	Yes
Yes	Yes
Not recommended	Yes
Opaque Packaging: Nuts and other oxygen sensitive salted snacks. Some liquids	Opaque Packaging: Spices, snacks and novelties requiring extra barrier. Hard to hold contents snacks and nuts

Flexible Packaging Film/Film Laminations

	Clear Multi-Ply Snack Web 260 HB Spec# 79125	White & Silver/Metallized Multi-Ply Snack Web 260 HB Spec# 79355 - White Spec# 79354 - Silver
Structure		
Description	PET face laminated to clear EVOH/m LLDPE film	PET face laminated to Metallized PET film with extrusion seal
Construction	49 Ga. PET/2m Clear EVOH/mLLDPE	48 ga. PET/10#(W)LDPE/48 ga. Metallized PET/12#Metallocene
Total Construction Caliper	2.6 mils	2.6 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging Film Inks - Contact Ink Supplier
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Good	Good
Stiffness/Flexibility	Average	Average
Tear Resistance (grams-force)	Not Tested	Not Tested
Barrier Layer Performance Properties		
Chemical Resistance	Average	Average
Light	Poor	Poor
Moisture Vapor Transmission Rate	0.41 grams/100 sq. in./day	0.02 grams/100 sq. in./day
Odor	Average	Average
Oxygen Transmission Rate	0.05 cc./100 sq. in./day	0.04 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	Good	Good
Hot Tack	Good	Good
Coefficient of Friction	0.25 (Kinetic, seal to seal)	0.25 (Kinetic, seal to seal)
Puncture Resistance	Not Tested	Not Tested
Seal Initiation Temperature	300°F	300°F
Seal Strength	300°F/ 20 PSI/ 1.0 sec.	2500 (g/in) @ 350°F/ 20 PSI/ 0.5 sec.
Seal through Contamination	Good	Good
Mullen Burst Strength	Not Tested	Not Tested
Material Strengths	Clarity, EVOH provides excellent OTR barrier properties, good MVTR and hermetic seals for extended shelf life	Topcoated face with good OTR barrier properties (without Saran®), good MVTR, and hermetic seals for extended shelf life. White outside/ silver inside
Packaging Applications		
Compliance	21 CFR 177.1520 and/or 21 CFR 177.1350, 21 CFR 177.1330	21 CFR 177.1520, 21 CFR 178.3860, 21 CFR 176.170
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	Yes
Liquids	Yes	Not recommended
End-Use Applications	Spices, snacks and novelties requiring clear packaging and extra barrier. Hard to hold contents snacks and nuts	Dry snacks and powders

Metallized Coffee Web 200 HB Spec# 79426	Clear Multi-Ply SUP 360 SB Spec # 79934
Metallized PET face laminated to LLDPE film	Print treated PET laminated to Clear EVOH sealant
48 ga. metallized PET/Adh/1.5 Mil LLDPE film	48g Clear PET / 3M Clear EVOH/mLLDPE
2.0 mils	3.6 mils
Flexible Packaging Film Inks - Contact Ink Supplier	Print treated - Flexible Packaging Film Inks - Contact Ink Supplier
Excellent	Excellent
Good	Good
Average	Excellent
Not Tested	61 MD / 60 CD
Average	Average
Poor	Poor
0.1 grams/100 sq. in./day	.35 grams/100 sq in / day
Average	Average
0.1 cc./100 sq. in./day	.07 cc/ 100 sq in / day
Good	Good
Good	Good
0.2 (Kinetic, seal to seal)	.215 Kinetic (seal to seal)
Not Tested	Good
300°F	290 F
	Destruct
Good	Good
Not Tested	Not Tested
Topcoated face provides excellent printability and excellent UV, OTR and MVTR barrier properties and hermetic seals for extended shelf life.	Clarity, EVOH provides excelent OTR barrier, good hermetic seals for extended shelf life, high barrier and heavier sealant for stand up pouch with added ability to add reclosable functionality.
21CFR 177.1520, 177.1350, 178.2010, 178.3297 and 178.3860.	
Yes	Yes
Yes	Yes
Not recommended	Yes
Coffee - single serve, ground coffee packages. Not suitable for coffee beans. Can be used for dry snacks like peanuts.	Food, Personal Care, Nutracuetical and Pet including snacks, pet foods, treats, personal care

	Flexible Packaging Film/Film Laminations	Flexible Packaging Paper Laminations
	White Multi-Ply SUP 360 SB Spec # 79935	**25# PPFP FSC® Spec# C0650**
Structure		
Description	Print treated PET laminated to Clear EVOH sealant	Coated paper facestock with foil barrier and LDPE sealant
Construction	48g Clear PET / 3M White EVOH/mLLDPE	25# C1S/7.2# LDPE/Foil/13# LDPE
Total Construction Caliper	3.6 mils	3.05 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Print treated - Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging paper inks.
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Good	Average
Stiffness/Flexibility	Excellent	Good
Tear Resistance (grams-force)	78 MD / 58 CD	40 MD/58 CD
Barrier Layer Performance Properties		
Chemical Resistance	Average	Average
Light	Excellent	Excellent
Moisture Vapor Transmission Rate	.35 grams/100 sq in / day	0.000 grams/100 sq. in./day
Odor	Average	Excellent
Oxygen Transmission Rate	.07 cc/ 100 sq in / day	.000 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	Good	Good
Hot Tack	Good	Good
Coefficient of Friction	.239 Kinetic (seal to seal)	.567 Kinetic (Seal to Seal)
Puncture Resistance	Good	3.7 (pounds-force)
Seal Initiation Temperature	290 F	250°F
Seal Strength	Destruct	2400 (g/in) @ 300°F/ 20 PSI/ 0.5 sec.
Seal through Contamination	Good	Good
Mullen Burst Strength	Not Tested	30 psi
Material Strengths	Good Opacity, EVOH provides excellent OTR barrier, good hermetic seals for extended shelf life, high barrier and heavier sealant for stand up pouch with added ability to add reclosable functionality.	Better quality print surface than uncoated facestock. Runs well and widely accepted on a variety of packaging equipment. PPFP will tear open without iniation notch. Good Deadfold.
Packaging Applications		
Compliance		21 CFR Sections 177.1520 and 177.1310, 21 CFR section 176.170 (c), Tables 1 and 2
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	Yes
Liquids	Yes	Not recommended
End-Use Applications	Food, Personal Care, Nutracuetical and Pet including snacks, pet foods, treats, personal care	Lightweight packages such as dry powders and other dry packaged foods.

25# PPFP w/Surlyn® 385 **Spec# B4986**	**25# PPMOPP 260** **Spec# 75746**
Coated paper facestock with foil barrier and Surlyn® sealant	Coated paper face with metallized OPP sealant
25# C1S/ 7.2# LDPE/Foil/ 22# Surlyn®	25# C1S/7# LDPE/Heat-Sealable MOPP
3.8 mils	2.5 mils
Flexible Packaging paper inks.	Flexible Packaging paper inks.
Excellent	Excellent
Average	Good
Good	Average
80 MD/80 CD	30 MD/33 CD
Average	Average
Excellent	Excellent
0.001 grams/100 sq. in./day	0.008 grams/100 sq. in./day
Excellent	Excellent
.000 cc./100 sq. in./day	1.0 cc./100 sq. in./day
Excellent	Average
Excellent	Good
.486 Kinetic (Seal to Seal)	.4 Kinetic (Seal to Seal)
3.9 (pounds-force)	9.8 (pounds-force)
240°F	230°F
300°F/ 202400 (g/in) @ 300°F/ 20 PSI/ 0.5 sec.PSI/ 1.0 sec.	1000 (g/in) @ 350°F/ 20 PSI/ 0.5 sec.
Excellent	Poor
26 psi	46 psi
Surlyn® layer helps seal thru contamination when sealing. Runs well and widely accepted on a variety of packaging equipment.	Foil-less pouch stock contributes to better packaging durability. Test for packaging line machinability. Requires a notch to open.
21 CFR Sections 177.1520 and 177.1310, 21 CFR section 176.170 (c), Tables 1 and 2	FDA - CFR177.1520
Yes	Yes
Yes	No
Not recommended	Not recommended
Lightweight packages such as light, dry powders and mixes that are difficult to seal due to contamination. Good for towelettes and airborne powder.	Lightweight packages such as soup mix and other dry packaged goods.

Flexible Packaging Paper Laminations

	35# C1S/ 14# LDPE 310 HB Spec# 79026	35# PPMOPP 315 Spec# 75742
Structure		
Description	Heavyweight coated paper facestock with LDPE sealant	Heavyweight coated paper face with metallized OPP sealant
Construction	35# C1S / 14# LDPE	35# C1S/7# LDPE/Heat Sealable MOPP
Total Construction Caliper	3.2 mils	3.15 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Flexible Packaging paper inks.	Flexible Packaging paper inks.
Exterior Layer Performance Properties		
Dimension Stability	Good	Excellent
Flex Crack Resistance	Good	Good
Stiffness/Flexibility	Average	Average
Tear Resistance (grams-force)	32.9 MD/43.1 CD	37.3 MD/44.8 CD
Barrier Layer Performance Properties		
Chemical Resistance	Poor	Average
Light	Average	Excellent
Moisture Vapor Transmission Rate	1.33 grams/100 sq. in./day	0.008 grams/100 sq. in./day
Odor	Average	Excellent
Oxygen Transmission Rate	195 cc./100 sq. in./day	1.0 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	Good	Average
Hot Tack	Good	Good
Coefficient of Friction	.4 Kinetic (Seal to Seal)	.4 Kinetic (Seal to Seal)
Puncture Resistance	Not Tested	9.5 (pounds-force)
Seal Initiation Temperature	230°F	260°F
Seal Strength	325°F/ 20 PSI/ 0.3 sec.	1000 (g/in) @ 350°F/ 20 PSI/ 0.5 sec.
Seal through Contamination	Poor	Poor
Mullen Burst Strength	Not Tested	36 psi
Material Strengths	Simple paper/poly lamination for dry goods with short shelf life and no exposure to moisture. Higher end to a sugar packet material.	Foil-less pouch stock contributes to better packaging durability and heavier weight paper provides packaging stiffness. Test for packaging line machinability. Material requires notch for opening.
Packaging Applications		
Compliance	CFR title 21, Sections: 176.170 / 177.1520	21 CFR 177.1520(c)2.2
Dry Ingredients	Yes	Yes
Powdered Ingredients	Some	Yes
Liquids	Not recommended	Not recommended
End-Use Applications	Dry goods - short shelf life: candy, granular packets.	Applications requiring additional package stiffness and puncture resistance such as noodles or rice.

Flexible Packaging StickPack Laminations

35# PPFP 385 **Spec# C0651**	**White StickPak LDPE 280 HB** **Spec# 79340**
Heavyweight coated paper facestock with foil barrier and LDPE sealant	Printable polyester-faced laminated pouching material designed for tubular form fill and seal equipment
35# C1S / 7.2# LDPE/ Foil/13# LDPE	48 ga. PET Film/White PE/ Foil/21.6# LDPE
3.6 mils	2.9 mils
Flexible Packaging paper inks.	Flexible Packaging Film Inks.
Excellent	Excellent
Average	Very Good
Good	Good
60 MD/50 CD	29.8 MD/40.8 CD
Average	Average
Excellent	Excellent
0.000 grams/100 sq. in./day	0.0004 grams/100 sq. in./day
Excellent	Excellent
.001 cc./100 sq. in./day	.01 cc./100 sq. in./day
Good	Average
Good	Average
.507 Kinetic (Seal to Seal)	.015 (Kinetic, seal to seal)
3.7 (pounds-force)	11 (pounds-force)
250°F	340°F
2400 (g/in) @ 300°F/ 20 PSI/ 0.5 sec.	7000 (g/in) @ 350°F/ 40 PSI/ 1.2 sec.
Good	Good
35 psi	55 psi
Heavier weight paper provides packaging stiffness. Runs well and widely accepted on a variety of packaging equipment. Does not require a notch to open.	Good stickpak stock for general purpose. PET film offers high gloss and resists staining.
21 CFR Sections 177.1520 and 177.1310, 21 CFR section 176.170 (c), Tables 1 and 2	CFR title 21, Sections: 176.170 / 177.1520
Yes	Yes
Yes	Yes
Not recommended	Not recommended
Applications requiring additional package stiffness, good deadfold and puncture resistance such as gravy and soup mixes.	Dry goods packaged in vertical stickpak machines

Flexible Packaging StickPack Laminations

	White StickPak w/Metallocene 320 HB Spec# 78432	White or Silver StickPak w/Surlyn® 280 HB Spec# 79343 - White Spec# 79344 - Silver
Structure		
Description	Printable polyester - faced laminated pouch film design for tubular form / fill machines	Printable polyester-faced laminated pouching material design for tubular form/fill/seal equipment.
Construction	48 ga. PET/10# (W)LDPE/ Foil/7#LDPE/1.25 Mil Metallocene	48 ga. PET/10# WLDPE/Foil/18# SURLYN®
Total Construction Caliper	3.2 mils	2.85 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Flexible Packagig Film Inks NOTE: must corona treated prior to printing	Flexible Packaging Film Inks.
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Good	Good
Stiffness/Flexibility	Good	Good
Tear Resistance (grams-force)	84.0 MD/90.5 CD	38.4 MD / 44.8 CD
Barrier Layer Performance Properties		
Chemical Resistance	Excellent	Excellent
Light	Excellent	Excellent
Moisture Vapor Transmission Rate	0.0004 grams/100 sq. in./day	0.0004 grams / 100 sq in /day
Odor	Excellent	Excellent
Oxygen Transmission Rate	.01 cc./100 sq. in./day	.01 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	Excellent	Average
Hot Tack	Excellent	Average
Coefficient of Friction	0.23 (Kinetic, seal to steel)	0.4 (Kinetic, seal to steel)
Puncture Resistance	12.7 (pounds-force)	13.4 (pounds-force)
Seal Initiation Temperature	260°F	250°F
Seal Strength	7000 (g/in) @ 350°F/ 20 PSI/ 0.5 sec.	4000 grams @ 350°F/ 40 PSI .5 sec
Seal through Contamination	Excellent	Excellent
Mullen Burst Strength	52.5 psi	48.8 psi
Material Strengths	Excellent gloss. Good chemical resistance, printability and stiffness for packaging line machinability. COF allows this to run very well on multi-lane stickpack equipment	Excellent gloss. Good chemical resistance and printability. Best seal thru contamination product
Packaging Applications		
Compliance	21 CFR 176.170	21 CFR 177.1330(a)
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	Yes
Liquids	Some - Must Test	Some - Must Test
End-Use Applications	Designed for high speed, tubular formed, powdered drink mix packets.	Applications requiring excellent seal through contamination properties such as high dust environments,and high oil or fat concentrations. Drink mixes, sugar sweeteners for retail and food service packaging, nutritional supplements.

White 86G Cello StickPak Surlyn HB Plus Spec# B9543	White Cosmetic Web 350 SB Spec# 75758
Easy Tear Cellulose faced laminated pouch material designed for tubular form/fill machines.	White PET faced laminated pouch film
86 ga cello/9# WLDPE/Foil/18# Surlyn Co-Ex	48 ga. PET/10# WLDPE/Foil/10# HB/PE/1.5 Mil LLDPE Film
3 mils	3.5 mils
Flexible Packaging Film Inks.	Flexible Packaging Film Inks - Contact Ink Supplier
Excellent	Excellent
Excellent	Good
Good	Average
44 MD / 47.6 CD	59 MD/72 CD
Excellent	Good
Excellent	Excellent
0.0004 grams / 100 sq in /day	0.0004 grams/100 sq. in./day
Excellent	Excellent
.01 cc./100 sq. in./day	.01 cc./100 sq. in./day
Excellent	Good
Excellent	Good
0.15 (Kinetic, seal to steel)	0.34
13.4 (pounds-force)	14.7 (pounds-force)
230°F	340°F
4000 grams @ 350°F/ 20 PSI .5 sec	7000 (g/in) @ 350°F/ 40 PSI/ 0.5 sec.
Excellent	Good
57.2 psi	58 psi
Bio-Based film face with excellent gloss. Good chemical resistance, printability and stiffness for packaging line machinability. Note: No notch required to open	Excellent gloss. Good barrier for both liquid and dry goods.
CFR title 21, Sections: 179.3910 / 177.1520	21 CFR 176.170
Yes	Yes
Yes	Yes
Some - Must Test	Some
Excellent seal through contamination properties such as high dust environments,and high oil or fat concentrations. Designed for high speed, tubular forms. Common usages: powdered drink mix packets sugar sweeteners for retail, food service packaging and nutritional supplements. Designed to tear easily with no notching required.	General purpose wipes, lotions, shampoos, conditioners and other personal care items

Flexible Packaging Film/Foil Laminations

	White or Silver Cosmetic Web 350 HB Spec# 79332 - White Spec# 79333 - Silver	White Sustainable Cosmetic Web 350 HB Spec #B1885
Structure		
Description	White PET faced laminated pouch film	White print treated PCR PET laminated pouch film
Construction	48 ga. PET/10# WLDPE/Foil/10# HB/PE/1.5 Mil Metallocene Film	48g PCR PET/ 10# WLDPE/Foil/1-# HB-PE/1.5M Bio -Based PE
Total Construction Caliper	3.5 mils	3.5 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging Film Inks - Contact Ink Supplier
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Good	Good
Stiffness/Flexibility	Average	Average
Tear Resistance (grams-force)	57 MD/67 CD	114.4 MD / 162.3 CD
Barrier Layer Performance Properties		
Chemical Resistance	Good	Good
Light	Excellent	Excellent
Moisture Vapor Transmission Rate	0.0004 grams/100 sq. in./day	.0004 grams/100 sq in / day
Odor	Excellent	Excellent
Oxygen Transmission Rate	.01 cc./100 sq. in./day	.01 cc/ 100 sq in / day
Sealant Layer Performance Properties		
Caulk & Flow	Good	Good
Hot Tack	Good	Good
Coefficient of Friction	0.35	.15 Kinetic
Puncture Resistance	14.7 (pounds-force)	Not Tested
Seal Initiation Temperature	300°F	350°F
Seal Strength	7000 (g/in) @ 350°F/ 40 PSI/ 0.5 sec.	>10 lbs
Seal through Contamination	Excellent	Good
Mullen Burst Strength	54.9 psi	Not Tested
Material Strengths	Excellent gloss. Good barrier for both liquid and dry goods. Good seal thru contamination with added chemical resistance and a wide seal temperature range.	Excellent gloss. Good barrier for both liquid and dry goods. Can be tested for applications using virgin cosmetic web. Provides 12% virgina material reduction using both PCR and bio-based resins.
Packaging Applications		
Compliance	21 CFR 176.170 and 21 CFR 177.1350.	
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	Yes
Liquids	Some	Yes
End-Use Applications	General purpose wipes, lotions, shampoos, conditioners and other personal care items	Wet and dry goods in food, cosmetic, nutraceutical and per food/ treats.

White or Silver Cosmetic Web Ultra 370 HB Spec# 77553 - White Spec# 78857 - Silver	**White or Silver Cosmetic Ultra Plus 530 HB Spec# 79334 - White Spec# 79335 - Silver**
White PET faced laminated pouch film	White PET faced laminated pouch film
48 ga. PET/10# WLDPE/Foil/10# ACP/1.5 Mil LLDPE	48 ga. PET/12# WLDPE/Foil/12# ACP/3 Mil Metallocene F
3.7 mils	5.3 mils
Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging Film Inks - Contact Ink Supplier
Excellent	Excellent
Good	Good
Average	Good
50 MD/75 CD	96 MD/134 CD
Excellent	Excellent
Excellent	Excellent
0.0004 grams/100 sq. in./day	0.0004 grams/100 sq. in./day
Excellent	Excellent
.01 cc./100 sq. in./day	.01 cc./100 sq. in./day
Good	Good
Good	Good
0.4	0.29
14.2 (pounds-force)	17.4 (pounds-force)
340°F	340°F
7000 (g/in) @ 350°F/ 40 PSI/ 0.5 sec.	7000 (g/in) @ 350°F/ 40 PSI/ 0.5 sec.
Good	Excellent
58 psi	60.2 psi
Excellent gloss. Excellent chemical resistance for wet and dry goods.	Excellent gloss. Excellent chemical resistance for wet and dry goods requiring superior seal and burst strength.
21 CFR 176.170 and 21 CFR 177.1350.	21 CFR 176.170 and 21 CFR 177.1350.
Yes	Yes
Yes	Yes
Some	Yes
Products requiring extra barrier due to aromatic or aggressive ingredients such as sun tan lotion.	Products requiring extra barrier due to aromatic or aggressive ingredients such as sun tan lotion. Superior seal and burst strength to withstand mail and transportation.

Flexible Packaging ChemControl Laminations

	ChemControl Ultra Spec# 54025	ChemControl Premium Ultra Spec# 79537
Structure		
Description	White PET faced laminated pouch film	White PET faced laminated pouch film
Construction	48G PET/WLDPE/FOIL/ADH / 2M HB SEALANT	48G PET/WLDPE/FOIL/ADH/ BARRIER FILM/ADH/2M PE
Total Construction Caliper	3.6 mils	4.3 mils
Printability / Ink Recommendations (Contact your ink supplier for best recommendation)	Flexible Packaging Film Inks - Contact Ink Supplier	Flexible Packaging Film Inks - Contact Ink Supplier
Exterior Layer Performance Properties		
Dimension Stability	Excellent	Excellent
Flex Crack Resistance	Good	Good
Stiffness/Flexibility	Average	Average
Tear Resistance (grams-force)		124 CD/55MD
Barrier Layer Performance Properties		
Chemical Resistance	Excellent	Excellent
Light	Excellent	Excellent
Moisture Vapor Transmission Rate	<0.02 grams/100 sq. in./day	0.002 grams/100 sq. in./day
Odor	Excellent	Excellent
Oxygen Transmission Rate	<.02 cc./100 sq. in./day	.002 cc./100 sq. in./day
Sealant Layer Performance Properties		
Caulk & Flow	Good	Good
Hot Tack	Good	Good
Coefficient of Friction	.35 Kinetic (seal to seal)	.4 Kinetic (seal to seal)
Puncture Resistance	Not Tested	Not Tested
Seal Initiation Temperature	230°F	340°F
Seal Strength	4535 (g/in) @ 350°F/ 40 PSI/ 0.5 sec.	7000 (g/in) @ 350°F/ 40 PSI/ 1.0 sec.
Seal through Contamination	Excellent	Good
Mullen Burst Strength		Not Tested
Material Strengths	Treated facestock with high barrier sealant film for hard to hold ingredients. Excellent seal strength.	C1S facestock with excellent barrier and seal strength for ease of packaging and containing aggressive and volatile ingredients.
Packaging Applications		
Compliance	FDA - 175.105, 177.1520, 177.1630 AND 178.3910	FDA - 175.105, 176.170, 177.1520, 177.1630 AND 178.201
Dry Ingredients	Yes	Yes
Powdered Ingredients	Yes	Yes
Liquids	Yes	Yes
End-Use Applications	Designed for hard to hold ingredients requiring extra chemical resistance. Fit for Use Testing is recommended	Designed for volatile ingredients requiring highest chemical resistance. Fit for Use Testing is recommended

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