

### All Good Things Come in Safe Packaging Pharmaceutical and Healthcare Collection



## **Pharmaceutical**

### Tamper-evident security labelling

Box damage labels to protect against tampering.

### TT Sensor<sup>™</sup> Plus technology

Ensure consistent quality of temperature-sensitive products.

# Tested. Proven. Consistent. Compliant.

Our dedicated portfolio of key paper and film products offers you tailored options for a variety of applications. Plus, our customer-ready products offers an added layer of security, lessening the chances for issues such as contamination and recalls. The portfolio provides:

- > An easier way to understand and introduce pharmaceutical labeling solutions
- Improved range of products addressing simple to complex application needs
- > Quick lead times and shorter time to market with use of pre-tested constructions
- > Increased brand owner familiarity

# Winder Labeling

Labels specifically designed for small diameter syringes and auto-injectors for better dosage security and sterility.

# **Solutions**

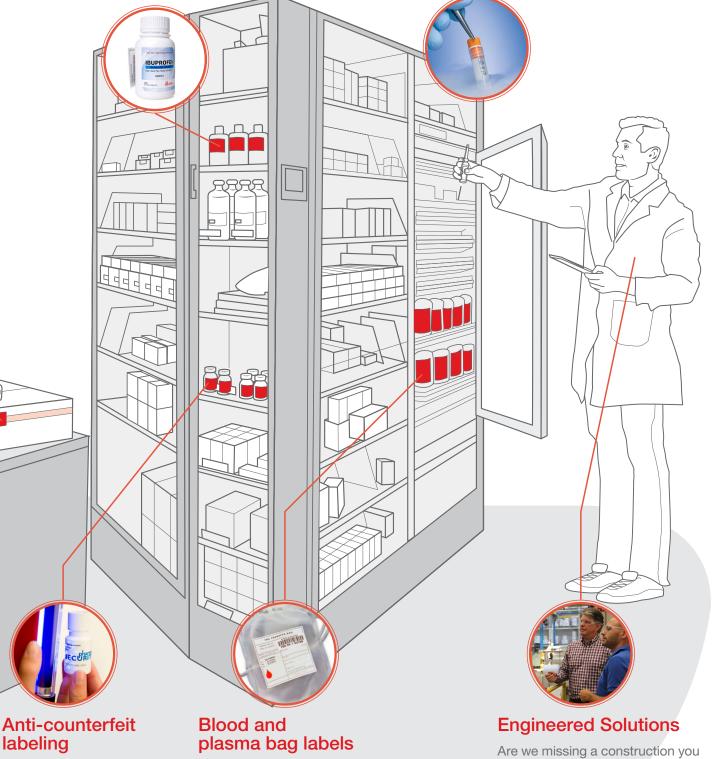
### Ethical and OTC containers

Servicing the growing demand for ethical products.

### **Cold Chain labeling**



Ensure clear identification of biological materials from collection to storage, transportation and delivery to the medical facility and, ultimately, the patient.



Protect pharmaceutical products against counterfeiting.

Reliability and simplicity for identification labeling.

Are we missing a construction you need? We have a team of technical solutions leaders dedicated to developing one-of-a-kind, engineered solutions that fit your time line.

### Key Paper and Film Products for Ethical Rx and Consumer Healthcare

This broad core of proven products has been specifically selected to work in multiple applications, including:

- > Ophthalmic
- > Small diameter syringe, vial and ampoule labeling

Princip

- > Ethical, generic and over-the-counter drug delivery
- > Extended content labeling

### **Core Advantages**

**TESTED:** Independently tested for an added layer of protection.

	Adhesive Testing	S727	S717P	S692NP	S246	PASS
O 10993 / 6)	Cytotoxicity Result: No mutagenic potential					FAIL
	Sensitization Result: Not a contact sensitizer					NOT TESTED
GY (IS SAR 1	Skin Irritants Result: Low irritation*					-
TOXICOLOGY (ISO FHSAR 16)	Eye Irritants Result: Low irritation**					
	Acute Oral Toxicity Result: Not orally toxic					_
	FDA Drug Master File Listing	Yes	Yes	Yes	Yes	

\*<1.0 on the Draize Primary Skin Irritation Scoring System (Scale=0-8)

\*\*<5.0 on the Draize Classification of Eye Irritation Scoring System (Scale=0-110)

**Results:** All four low-migration adhesives test negative for oral toxicity and have been shown to present low risk of eye and skin irritation. In addition, the S727 and S717P adhesives, recommended for critical pharmaceutical applications, have undergone testing for cytotoxicity and contact sensitization. Independent testing in accordance with ISO 10993-5 standards confirms neither adhesive presents any mutagenic potential.

### **CONSISTENT:** Component change minimization and robust notification commitment for

peace of mind.

- > We strive for minimal component change disruptions
- > We provide automatic notification of any planned component changes
- > We offer safety stock of 3-12 months to facilitate re-qualification depending on the type of component change

**COMPLIANT:** Meeting a wide range of regulatory standards.

FDA 175.105	Result: Approved
CONEG	Result: Does not contain
Reach 2	Result: Does not contain
ROHS / WEEE	Result: Pass

# Paper Overview

### Paper Facestock Descriptions

Pharma Cast Gloss+	Cast-coated, uncalendered paper featuring superior gloss, high strength and excellent print quality.
Pharma High-Gloss	Coated, calendered paper offering superior gloss, high strength and high-quality printing.
Pharma Semi-Gloss	Coated, super-calendered paper with moderate gloss, high strength, and high-quality printability. This facestock offers a marked reduction in the occurrence of surface contamination compared to traditional semi-gloss.
Lightweight Pharma Litho	Matte-coated, calendered paper providing superior flexibility and good printability. Recommended for tight mandrel applications (<1/4" substrate diameter).

### Paper Facestock Characteristics

	Basis Weight	Caliper	uo	ping	ess	ty	~	
Paper Type	lbs/ream (Ream = 500 25" x 38" sheets)	Thickness in Mils (1Mil = 1/1000 inch)	Print Resolution	Date Stamping	Smoothness	Flexibility	Opacity	Gloss
Pharma Cast Gloss+	60	3.5						
Pharma High-Gloss	60	2.9						
Pharma Semi-Gloss	60	3.1						
Lightweight Pharma Litho	40	2.8						
			·	Ex	cellent		·	·

Good

Not Recommended

### Adhesives for Paper Components Adhesive Descriptions

S727	High-performance, permanent solvent acrylic adhesive ideal for tight mandrel labeling. Widely used in applications requiring sterilization. Ideal for critical pharmaceutical applications requiring an extended component change notification commitment.
S717P	High-performance, permanent emulsion acrylic adhesive ideal for tight mandrel labeling. Widely used in applications requiring sterilization. Ideal for critical pharmaceutical applications requiring an extended component change notification commitment.
S692NP	General-purpose, permanent emulsion acrylic adhesive with good adhesion to low-energy substrates (e.g. squeezable containers). Often used in applications requiring sterilization. Ideal for consumer health care applications requiring a moderate component change notification commitment.
S246	General-purpose, permanent hot melt adhesive featuring high initial tack and ultimate adhesion. Ideal for consumer health care applications requiring a minimum component change notification commitment.

### Typical Adhesive Performance Characteristics (with Paper Facestocks)\*

٥	n on ure	ure	цо	ange on ent	Ste	erilizatio	on*	A	dhesior	٦*		all Diam 1/4 inch	
Adhesive	Minimum Application Temperature	Service Temperature Range	Application	Adhesive Change Notification Commitment (Months)	Autoclave	ETO	Gamma	Glass	ЪЕ	ЪР	Glass	ЪЕ	ЧЧ
S727	+50° F	-65° F to +250° F	Ethical Drugs & Medical Devices	12									
S717P	+50° F	-65° F to +250° F	Ethical Drugs & Medical Devices	12									
S692NP	+23° F	-20° F to +200° F	Consumer Healthcare	6									
S246	+40° F	-65° F to +160° F	Consumer Healthcare	3									

\*Application-specific testing required.

Recommended

Product dependent/testing recommended

Not Recommended

### NOL NECOMMENDE

### Liners for Paper Components Liner Descriptions

40#CK 40#SCK 50#SCK	Bleached, calendered and super-calendered kraft release liners featuring high internal strength and tear resistance. Excellent for die cutting and dispensing.
44#PK	Poly-coated natural kraft (brown) paper liner for roll-to-roll applications. Specially designed for high-speed automatic label dispensing applications.
Ultraliner®	Proprietary extruded polyolefin film liner for paper facestocks. Rough backside to support print registration for multi-color jobs.
1.2 Mil PET 1.5 Mil PET	Clear, durable polyester liner appropriate for high-speed die cutting and dispensing.
ABC	Anti-block coating applied to the back side of the liner to prevent label transfer to the liner back when rolls of labels are unwound. Generally used with film facestocks or heavy adhesive coat weights.

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### Paper Specs

Application	Facestock	Spec#	Adhesive	Liner	Width/Length (In./Ft.)	Location	Lead Time	
			0707	10/10/01/	EXACT/5000	PVL/WCT	1 day	
		07609	S727	40#SCK	60/1668	PVL/WCT	1 day	
					EXACT/5000	PVL/NEE	1 day	
			07610	S727	ULTRALINER	Ready Width 10/10,000	WCT	1 day
	Pharma				60/1668	PVL/WCT/NEE	1 day	
	Cast Gloss+	07612	S727	50#SCK	60/1668	NEE	1 day	
		07641	S727	1.5 Mil PET	60/4167	PVL	5 days	
		53279	S717P	40#SCK	60/1668	PVL	1 day	
		53280	S717P	50#SCK	60/4167	PVL	5 days	
		53281	S717P	ULTRALINER	EXACT/2500	PVL	5 days	
		53286	S717P	1.5 Mil PET	60/4167	PVL	5 days	
		08222	S727	50#SCK	60/4167	PVL	5 days	
	Pharma	53169	S727	ULTRALINER	60/1668	PVL	1 day	
Ethical Druga	High-Gloss	53283	S717P	40#SCK	60/1668	PVL	1 day	
		53284	S717P	ULTRALINER	60/3000	PVL	5 days	
Ethical Drugs & Medical Devices		53409	S727	40#SCK	60/3500	PVL	5 days	
		53412	S727	1.5 Mil PET	60/4167	QTN	5 days	
	Pharma	53411	S727	50#SCK	60/4167	PVL/FTW	5 days	
	Semi-Gloss			EXACT/2500	PVL	5 days		
		53349	S717P	40#SCK	60/1668	PVL	1 day	
				EXACT/5000	QTN	1 day		
		07944*	S727	40#SCK (ABC)	60/1668	QTN	1 day	
		07945*	S727	50#SCK (ABC)	60/1668	PVL	1 day	
		07948*	S727	ULTRALINER	EXACT/5000	PVL	1 day	
	Lightweight	07948*	S727	ULTRALINER	60/1668	PVL	1 day	
	Pharma Litho	08809*	S727	1.5 Mil PET	60/2500	PVL	5 days	
		53282*	S717P	ULTRALINER	60/1668	NEE	1 day	
		53285*	S717P	40#SCK	60/3000	PVL	5 days	
		53343*	S717P	1.2 Mil PET	60/1668	PVL	1 day	
					EXACT/10.000	QTN/PTC/NEE	1 day	
		07601	S246	40#CK	78/1668	QTN/PTC/NEE/ FTW/WCT	1 day	
	Pharma	14474 (splice-free)	S246	40#CK	EXACT/5000	QTN/PTC/FTW/ TOR/WCT/NEE	1 day	
	Cast Gloss+	10101	0040		EXACT/10,000	QTN	1 day	
Consumer Healthcare		19161	S246	1.2 Mil PET	78/1668	QTN	1 day	
		07000	0040		EXACT/10,000	PTC	1 day	
		07806	S246	ULTRALINER	60/1668	PTC	1 day	
		53350	S246	40#SCK	EXACT/5000	PTC	1 day	
	Pharma	53407	S246	44#PK	60/10,000	FTW	5 days	
	Semi-Gloss	53408	S246	1.5 Mil PET	30/1668	PTC	5 days	

\* Recommended for tight mandrel applications

Locations: DAL-Dallas, TX; FTW-Fort Wayne, IN; GFD-Greenfield, IN; MTL-Montreal; NEE-Neenah, WI; PVL-Painesville, OH; PTC-Peachtree City, GA; QTN-Quakertown, PA; SEA-Seattle, WA; TOR-Toronto; WCT-West Coast

# Film Overview

### Film Facestock Descriptions

Primax <sup>®</sup> 350 White	Flexible, white opaque polyolefin film featuring excellent conformability for full-squeeze applications. Offers excellent print quality, dispensability and dimensional stability.
FasClear <sup>®</sup> 350 Clear	Flexible, matte clear polyolefilm film offering excellent conformability for full-squeeze applications. Offers excellent print quality, dispensability and dimensional stability.
2.6 Mil White BOPP TC	Rigid, pearlized white biaxially-oriented polypropylene film with good conformability and high print quality. Cost-saving alternative to polyester.
2.0 Mil Clear BOPP TC	Rigid, ultra-clear, biaxially-oriented polypropylene film with good conformability and high print quality. Cost-saving alternative to polyester.
1.5 Mil Reveal PET	Rigid, ultra-clear, polyester film with good conformability and excellent durability.
2.3 Mil White BOPP TT	Rigid, pearlized white biaxially-oriented polypropylene film with good controllability and thermal transfer printability.
2.0 Mil Clear BOPP TT	Rigid, ultra-clear, biaxially-oriented polypropylene film with good conform ability and thermal transfer printability.

### Film Facestock Characteristics

		Caliper	t ation	Cutting	sing	ability	Ĺ.	S
Film Type		Thickness in Mils (1Mil = 1/1000 inch)	Print Registration	Die Cut	Dispensing	Conformability	Clarity	Gloss
Conformable	Primax <sup>®</sup> 350 White	0.0035 inches						TBD
Contonnable	FasClear® 350 Clear	0.0035 inches						TBD
	2.6 Mil White BOPP TC	0.0026 inches						TBD
	2.0 Mil Clear BOPP TC	0.0020 inches						TBD
Rigid	2.0 Mil Clear BOPP TT	0.00142 inches						TBD
	2.3 Mil White BOPP TT	0.0026 inches						TBD
	2.0 Mil Clear BOPP TT	0.0020 inches						TBD

Excellent

Good

Not Recommended

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### **Adhesives for Film Components**

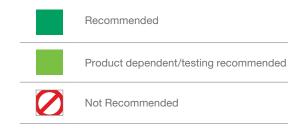
Adhesive Descriptions

S727	High-performance, permanent solvent acrylic adhesive ideal for tight mandrel labeling. Widely used in applications requiring sterilization. Ideal for critical pharmaceutical applications requiring an extended component change notification commitment.
S717P	High-performance, permanent emulsion acrylic adhesive ideal for tight mandrel labeling. Widely used in applications requiring sterilization. Ideal for critical pharmaceutical applications requiring an extended component change notification commitment.
S692NP	General-purpose, permanent emulsion acrylic adhesive with excellent adhesion to low-energy substrates (e.g. squeezable containers). Often used in applications requiring sterilization. Ideal for consumer health care applications requiring a moderate component change notification commitment.

### Typical Adhesive Performance Characteristics (with Film Facestocks)\*

o u e		nre	ЦО	Change ation tment ths)	Sterilization*			Adhesion*			Small Diameter (1/4 inch)*		
Adhesive	Minimum Application Temperature	Service Temperature Range	Application	Adhesive Chan Notification Commitment (Months)	Autoclave	ETO	Gamma	Glass	ЪЕ	ЪР	Glass	ЪЕ	ЪР
S727	+50° F	-65° F to +250° F	Ethical Drugs & Medical Devices	12									
S717P	+50° F	-65° F to +250° F	Ethical Drugs & Medical Devices	12									
S692NP	+23° F	-20° F to +200° F	Consumer Healthcare	6									

\*Application-specific testing required.



### **Liners for Film Components**

### **Liner Descriptions**

40# BG	Bleached, glassine white liner with good back printability. Designed for low-to medium-speed dispensing applications.
1.2 Mil PET	Clear, durable polyester liner appropriate for high-speed die cutting and dispensing.

### Film Specs

Application	Facestock	Spec#	Adhesive	Liner	Width/Length (In./Ft.)	Location	Lead Time
Ethical Drugs & Medical Devices	Primax <sup>®</sup> 350	79063*	S727	1.2 Mil PET	60/4167	PVL	5 days
		79064*	S727	40#BG	60/4167	PVL	5 days
		79043*	S717P	1.2 Mil PET	60/4167	PVL	5 days
		79044*	S717P	40#BG	60/4167	PVL	5 days
	FasClear® 350	79065*	S727	1.2 Mil PET	60/4167	PVL	5 days
		79066*	S727	40#BG	60/4167	PVL	5 days
		79045*	S717P	1.2 Mil PET	60/4167	PVL	5 days
					54/4167	PVL	5 days
		79046*	S717P	40#BG	60/4167	PVL	5 days
	2.6 Mil White BOPP TC	79059*	S727	1.2 Mil PET	60/4167	PVL	5 days
		79060*	S727	40#BG	60/4167	PVL	5 days
		79039*	S717P	1.2 Mil PET	60/4167	PVL	5 days
		79040*	S717P	40#BG	60/4167	PVL	5 days
	2 Mil Clear BOPP TC	79061*	S727	1.2 Mil PET	60/4167	PVL	5 days
		79062*	S727	40#BG	60/4167	PVL	5 days
		79041*	S717P	1.2 Mil PET	60/4167	PVL	5 days
		79042*	S717P	40#BG	60/4167	PVL	5 days
	1.5 Mil Reveal PET	79067	S727	1.2 Mil PET	60/4167	PVL	5 days
		79068	S727	40#BG	60/4167	PVL	5 days
		79047	S717P	1.2 Mil PET	60/4167	PVL	5 days
		79048	S717P	40#BG	60/4167	PVL	5 days
	2 Mil Clear BOPP TT	79703	S717P	1.2 Mil PET	60/2800	PVL	4 Days
	2.3 Mil White BOPP TT	79704	S717P	1.2 Mil PET	60/2800	PVL	4 Days
Consumer Healthcare	Primax <sup>®</sup> 350	79053	S692NP	1.2 Mil PET	60/4167	PVL	5 days
		79054	S692NP	40#BG	60/4167	PVL	5 days
	FasClear <sup>®</sup> 350	79055	S692NP	1.2 Mil PET	60/4167	PVL	5 days
		79056	S692NP	40#BG	60/4167	PVL	5 days
	2.6 Mil White	79049	S692NP	1.2 Mil PET	60/4167	PVL	5 days
	BOPP TC	79050	S692NP	40#BG	60/4167	PVL	5 days
	2 Mil Clear	79051	S692NP	1.2 Mil PET	60/4167	PVL	5 days
	BOPP TC	79052	S692NP	40#BG	60/4167	PVL	5 days
	1.5 Mil Reveal PET	79057	S692NP	1.2 Mil PET	60/4167	PVL	5 days
		79058	S692NP	40#BG	60/4167	PVL	5 days

\* Recommended for tight mandrel applications

Locations: DAL-Dallas, TX; FTW-Fort Wayne, IN; GFD-Greenfield, IN; MTL-Montreal; NEE-Neenah, Wi; PVL-Painesville, OH; PTC-Peachtree City, GA; QTN-Quakertown, PA; SEA-Seattle, WA; TOR-Toronto; WCT-West Coast



### **Specialty Portfolios**

As the pharmaceutical industry introduces more sophisticated and effective health solutions, Avery Dennison is there, keeping pace with a changing industry through innovations that add value:



Injectable Device Labeling For prefilled syringes, autoinjectors, vials and ampoules



Blood and IV Bag Labeling Specialized materials that withstand rigorous lifeycles and communicate critical information consistently and reliably



Ensuring clear identification of biological materials from collection to storage, transportation and delivery to the medical facility and, ultimately, the patient



Security Tamper-evident and anticounterfeiting solutions to create optimum brand protection

### Why Avery Dennison for Pharmaceutical Labeling and Packaging?

### Avery Dennison ADvantage: Technical Excellence

Avery Dennison ADvantage, is a global technical and customer service platform that helps converters enhance the efficiency of their business and effectiveness of their sales efforts. The service solutions cover a host of key business issues, including trade compliance, sustainability, operations and customer service. Our technical excellence team is here to help with scale-up, converting, application troubleshooting and employee training.

### **Engineered Solutions**

Missing a construction you need? Our dedicated team of technical solutions leaders develop one-of-a-kind, engineered solutions that fit your time line and your bottom line.

Visit label.averydennison.com/pharma or email pharma.north.america@averydennison.com to get started today!

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All comparisons are believed to be reliable and accurate. However, the furnishing of such information and comparisons is for reference purposes only and does not constitute a warranty of any kind. Actual product performance should always be tested for fitness-for-use

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