DURABLE PORTFOLIO

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Product Data Sheet
Spec#: 72824

2 Mil Bright Chrome Polyester TC/S333/50#SCK ABC

Facestock

2 Mil Bright Chrome Polyester TC is a bright metallic film featuring excellent tear strength, heat resistance, dimensional stability, opacity and chemical resistance. Designed for printing with most solvent and some water-based flexographic inks. Suitable for thermal transfer printing applications with select thermal transfer ribbons. Specific testing required.

Facestock physical properties

		Imperial Value	Units	Metric Value	Units
Caliper: ASTM D1000		0.0020	inches	50.80	micron
Tensile: ASTM D882	**MD**	31,200	PSI	2,193	kg/sq cm
	CD	36,900	PSI	2,594	kg/sq cm

Adhesive

S333 An excellent general purpose industrial grade clear permanent acrylc adheisve. Features high initial tack to most high and medium surface energy substrates.

Adhesive physical properties

		Imperial Value	Units	Metric Value	Units
Type:		Emulsion Acrylic			
Caliper: ASTM D1000		0.0008	inches	20.32	micron
Standard Coat Wt:				26	g/sq m
Minimum Appl Temp:		25	F	-4	C
Service Temp Range:	**Min**	-40	F	-40	C
	Max	300	F	149	C
Loop Tack Stainless Steel: PSTC11		36.0	oz/inch	39.6	N/100 mm

Liner

50#SCK is a bleached, super-calendered paper stock with very good diecutting and matrix stripping properties. Supplied with an Anti Block Coating ("ABC") on the backside of the liner to control adhesive and label transfer to the backside of the liner in finished, wound rolls. This liner should not be used in fanfolded label applications and is not recommended for back printability.

Liner physical properties

		Imperial Value	Units	Metric Value	Units
Caliper: ASTM D1000		0.0032	inches	81.2800	micron
Basis Wt: TAPPI T410 * (24" x 36" 500 sheets)		54.5	lbs/ream	88.8	g/sq m
Tensile: ASTM D882	**MD**	48.0	lbs/inch	211.2	N/25 mm
	CD	26.0	lbs/inch	114.4	N/25 mm
Tear: TAPPI T414	**MD**	1.8	ounces	49.9	grams
	CD	2.1	ounces	58.2	grams

Liner Release:

TMLI 90° removal of Liner from Facestock.

Rate of Removal	Grams/2" Width
400 inches/min.	40

Total Construction Caliper (approximate):

0.006 inches (6 mils; 152 micron

Features and Benefits

- Bright metallic mirror-like facestock with excellent opacity and hiding power.
- Glossy clear topcoat which accepts most flexographic, letterpress, and rotary screen inks
- Excellent thermal transfer printability with most wax/resin and resin ribbons
- Topcoat and adhesive have excellent chemical resistance

Applications and Uses

This product is suitable for a wide variety of durable labeling applications such as:

- Product identification labels
- Rating plates
- Property identification and asset labeling
- Durable goods labeling
- Recognized for UL 969 component labels. This product is UL Recognized and CSA Accepted for indoor and outdoor use (see appendix). For specific information and a complete product listing, see UL file #MH8212 for conditions on press-printed material or file #MH17205 for conditions on electronic printing, and CSA flie 97198.

Printing and Converting

The topcoat is designed for printing by flexography with most solvent and some water based inks. Specially formulated inks are not needed; however, testing is recommended prior to ink selection. Suitable for thermal printing applications with select ribbons. Specific testing required. This product can be diecut and stripped at high speeds on standard web-fed presses. Sample labels in a variety of shapes have been sucessfully dispensed and applied with standard labeling systems.

RoHS/Regulation 2002/95/EU

The substances listed in article 4 lid 1 of 2002/95/EU (RoHS) are not intentionally used in this product. The concentration limits of these substances will not exceed the set maximum concentration limits as provided in the proposed amendment for 2002/95/EU.

Shelf Life

Unless specified otherwise in this document, one year when stored at 72°F at 50% RH

Note:

The technical data presented is from tests we believe to be reliable but should be considered representative or typical only and should not be used for specifications purposes. This product should be tested thoroughly under end-use conditions to ensure it meets the requirements of the specific application.

Appendix

Performance Data:

The following technical data should be considered representative or typical only and should not be used for specification purposes.

	Initial (15 minute dwell)		72 Hours at Room Temperature		72 Hours at 120^{0}F		96 Hours at 150^{0}F (65^{0}C) & 80% Relative Humidity	
Surface	**oz/in**	**N/100mm**	**oz/in**	**N/100mm**	**oz/in**	**N/100mm**	**oz/in**	**N/100mm**
1. Aluminum	55	61	60	66	63	70	89	98
2. Stainless Steel	36.5	40.2	59.6	65.6	68.4	75.2	70.4	77.4
3. ABS Plastic	51.5	56.7	62.9	69.2	60.2	66.2	37.1	40.8
4. Polypropylene	19	21	5.4	5.9	28	31	19	21
5. HDPE	11.2	12.3	12.9	14.2	17.2	18.9	33.4	36.7
6. LDPE	13	14.3	28	31	12	13	15	16

Environmental Performance: Chemical Resistance test results

The performance results are based on 4 hour immersions at room temperature unless otherwise noted (gasoline or Reference Fuel C is 1 hour). Samples were applied to stainless steel panels and conditioned for 24 hours before immersion and evaluated immediately upon removal. Adhesion measured at 180° peel.

	Adhesion to Stainless Steel		Visual	Edge
Chemical	**oz/in**	**N/100mm**	**Appearance**	**Penetration mm**
1. 70% IPA	57.3	63	No Chnage	3.8
2. Tide® Detergent	40.5	44.6	No Change	0
3. Engine Oil (10W30)	46	50.6	No Change	0
4. Water	26.5	29.2	No Change	0
5. Ammonia - pH 11	0	0	No Change	0
6. 409® Cleaner	0.2	0.2	No Change	0
7. Toluene	12.4	13.6	No Change	3.3
8. Brake Fluid	48.96	53.9	No Change	0
9. Reference Fuel C	21.12	23.2	No Change	10.2
10. Kerosene K1	41.3	45.4	No Chnage	0
11. Heptane	47.5	52.3	No Change	0

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Compliance Recognition: UL, CSA

Underwriters Laboratories, Inc.

	Minimum Temperature		Maximum Temperature		
Substrates	**°F**	**°C**	**°F**	**°C**	**(I=Indoor Only I/O=Indoor & Outdoor)**
1. Aluminum	-40	-40	302	150	I/O
2. Galvanized Steel	-40	-40	302	150	I/O
3. Stainless Steel	-40	-40	302	150	I/O
4. Acrylic Paint	-40	-40	302	150	I/O
5. Epoxy Paint	-40	-40	302	150	I/O
6. Porcelain	-40	-40	302	150	I/O
7. Alkyd Enamel	-40	-40	302	150	I/O
8. Polyester Paint	-40	-40	302	150	I/O
9. Nylon	-40	-40	212	100	I/O
10. Polycarbonate	-40	-40	212	100	I/O
11. Melamine	-40	-40	212	100	I/O
12. Polystyrene	-40	-40	176	80	I/O
13. ABS Plastic	-40	-40	176	80	I/O
14. Unsat Thermoset Polyester	-40	-40	212	100	I
15. Phenolic	-40	-40	212	100	I
16. Polyphenylene Oxide	-40	-40	176	80	I
17. Polyethylene			140	60	I
18. and others					I

Recognized Ribbons: Armor "AXR600", Astro Med Inc "R-5", Astro Med "RF", Dai Nippon "R-300", Dai Nippon "R-510", Iimak "SP-410", Iimak "SP-330", Iimak "Primemark", Intermec "TMX 1500", Intermec "TMX 3200", ITW "R-91, ITW "B324", Japan Pulp & Paper "Resin 1", Japan Pulp & Paper "Sigma P", Kurz "K300", Kurz "K500", Kurz "K501", NCR "Promark 3", NCR "Resin Max", NCR "Perma Max", NCR "K3", Ricoh "B110C", Ricoh "B110CX", Ricoh "120EC", Sato Corp. "Premier 1", Sony "TR4070", Sony "TR4075", Sony "TR5070", Sony "TR6070", Sony "TR6075", Sony "Signature Series Resin", Union Chemicar "US300", Zebra "5095", Zebra "5100", Zebra "5463", Zebra "Z-4100", and others.

Canadian Standards Association

Substrates	Minimum Temperature		Maximum Temperature		
	°F	°C	°F	°C	(I=Indoor Only I/O=Indoor & Outdoor)
1. Metals	-40	-40	302	150	I/O
2. Plastics Group I	-40	-40	212	100	I/O
3. Plastics Group II	-40	-40	212	100	I/O
4. Plastics Group III	-40	-40	176	80	I/O
5. Plastics Group V	-40	-40	176	80	I/O
6. Plastics Group VI	-40	-40	176	80	I/O
7. Plastics Group VII	-40	-40	176	80	I/O
8. Plastics Group VIII	-40	-40	176	80	I/O

Acceptable Ribbons: Iimak "SP-330", Japan Pulp & Paper "Resin 1", Ricoh "B110C", Sony "TR4070", Sony "TR5070", Sony "Signature Series Resin", Zebra "5095"

The information on compliance conditions, substrates, and printing products contained in the tables above represent a summary of recognized or acceptable conditions and printing products. Other conditions, substrates, and printing products may be recognized with this material. Please consult the specific compliance organization records or specific files for a complete listing.

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Warranty
All sales and contracts for sale are expressly conditioned on the buyer's assent to Avery Dennison's terms and conditions found on its website at www.na.fasson.com. Avery Dennison hereby objects to any term, different from or additional to Avery Dennison's terms, contained in any buyer communication in any form, unless agreed to in a writing signed by an officer of Avery Dennison.

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www.na.fasson.com

Label and Packaging Materials-North America
8080 Norton Parkway
Mentor, OH 44060
800-944-8511