Avery Dennison[®] SC900 Super Cast Series

Opaque Permanent StaFlat™

Revision: 9 Dated: 06/25/18

Uses:

Avery Dennison SC900 series cast films are premium quality, flexible, opaque solid color high gloss vinyl films designed for use in a wide range of outdoor advertising, fleet marking, of outdoor uses where excellent durability, conformability, color, and gloss are required.



Face: high gloss cast film opaque - 2.0 mil (50 microns)



Adhesive: Permanent Acrylic (clear, grey or white)



Liner: 90# StaFlat

Application Surfaces:

Flat, Flat with Rivets, Corrugations, Deep Recesses

Features:

- Superior conformability to irregular substrates
- Deeply concave shaped
- Extremely convex shaped
- Compound (concave & convex) shaped
- Best performance on rivets
- Best conformance in channels
- Available in Pantone[®] Color simulations
- Outstanding durability and outdoor performance
- Dimensionally stable liner for easy converting
- High gloss finish
- Excellent conversion on CAD plotters
- Excellent UV, temperature, humidity, and salt-spray resistance
- Custom colors available (contact your sales representative)

Conversion:

- Thermal Die-Cutting
- Thermal Transfer
- Steel Rule Die-CutScreen Printing (StaFlat)

Common Applications:

- Trucks
- Trailers
- Cars & Vans
- Marine

- Architectural Signage
- Directional Signage
- Emergency Vehicles
- Trains & Light Rail

- Drum Roller Sign-Cut
- Buses
- OEM Durable Decals
- Outdoor Advertising

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Physical Characteristics:

Property	Measurement	Typical Value			
Caliper, face		opaque - 2.0 mil (50 microns)			
Caliper, adhesive		1.0 mil (25 μm)			
Dimensional stability		<0.015"(0.4 mm)			
Tensile at Yield		4.0 - 8.0 lb/in (0.7 - 1.5 kg/cm)			
Elongation		150% min.			
Gloss	Hunter Gloss @ 60 degrees	90 GU			
Adhesion:	15 min 24 hr	3.0 lbs/in (525 N/m) 3.5 lbs/in (613 N/m)			
Flammability	Self Extinguishing				
Shelf-Life		2 years from date of manufacture (when stored at the following temperatures and humidity conditions 68°-77° F (20° - 25° C) and 50 \pm 5% R. H.)			
Durability	Vertical Exposure	Reference color and warranty charts in this data sheet.			
Min. Application Temperature		50° F (10° C)			
Service Temperature		-50° to 180°F (-45° to 82° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).			
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions			

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Data represents average values where applicable, and is not intended for specification purposes.

Warranty:

This Warranty applies to the Product listed in this Data Sheet. All statements, technical information (including physical and chemical characteristics) and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold subject to the Purchaser's assent and agreement that Purchaser is responsible for, and has independently determined, the suitability of such products for its purposes or its customer's purposes. Avery Dennison products are warranted to be free from defects in material and workmanship (i) for two years from the date of manufacture, or (ii) from the date of manufacture until the expiration of the period stated on the specific Product Data Sheet in effect at the time of delivery.. Such time periods are subject in either case to the proper storing and application of said product, and the failure to properly store or apply the product, including without limitation the failure to follow any applicable Instructional Bulletin, negates any warranty. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited exclusively to: (a) repair or replacement of defective product without charge at Avery Dennison's plant or at the location of the product (at Avery Dennison's election), or (b) in the event repair or replacement are not commercially practical, a credit amount up to the price of the product taking into account the defect in the product in Avery Dennison's sole discretion.

THE WARRANTY EXPRESSLY SET FORTH ABOVE IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR USE AND/OR NON-INFRINGEMENT. SELLER SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND MANUALLY SIGNED BY AN OFFICER OF AVERY DENNISON.

AVERY DENNISON'S LIABILITY FOR DEFECTIVE PRODUCTS SHALL NOT EXCEED THE PURCHASE PRICE PAID THEREFORE BY PURCHASER AND IN NO EVENT SHALL AVERY DENNISON BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHETHER FORESEEABLE OR NOT, CAUSED BY DEFECTS IN SUCH PRODUCT, WHETHER SUCH DAMAGE OCCURS OR IS DISCOVERED BEFORE OR AFTER REPLACEMENT OR CREDIT, AND WHETHER OR NOT SUCH DAMAGE IS CAUSED BY AVERY DENNISON'S NEGLIGENCE.

All sales and contracts for sale of Products are subject to Purchaser's assent and agreement to this Warranty. Avery Dennison hereby objects to any terms or conditions contained in any purchase order or other communication of any kind from the Purchaser that is conflicting, inconsistent

or additional to this Agreement.

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Related Documents:

The following Avery Dennison literature will provide necessary information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison website (<u>www.graphics.averydennison.com</u>).

Document Title	Reference Number		
Substrate Cleaning and Preparation	Instructional Bulletin # 1.10		
Storage, Maintenance and Cleaning of PVC Films	Instructional Bulletin # 1.20		
Durability of Films	Instructional Bulletin # 1.30		
Converting Tips for Sign Films	Instructional Bulletin # 2.10		
Ink recommendations for Cast, Reflective, Calendered, and Specialty Products	Instructional Bulletin # 3.00		
Sericol TMI II Screen Inks: Metallics	Instructional Bulletin # 3.20		
Sericol TMI II Screen Inks: Four Color Process	Instructional Bulletin # 3.21		
Sericol TMI Screen Inks: Opaques, Translucents, and Transparents	Instructional Bulletin # 3.22		
Sericol UTMI II Overprint Clear Coat	Instructional Bulletin # 3.23		
Sericol TMI II 1000 Overprint Clear Coat	Instructional Bulletin # 3.24		
Nazdar 3500 UV Fleet	Instructional Bulletin # 3.30		
Application Instructions for Avery Dennison® Films	Instructional Bulletin # 4.00		
Removal Instructions for Avery Cast, Calendered, Reflective, and Polyester Films	Instructional Bulletin # 4.10		
Thermal Transfer Printing, Converting, Operating, and Product Instructions	Instructional Bulletin # 5.10		
Tips for Overlaminating, Premasking & Packaging Graphics	Instructional Bulletin # 5.50		
Stainless Steel Application Outdoor Durability	Tech Bulletin		

Colors & Expected Durability

Vertical Durability for Zone 1 vertical applications is noted in the chart below. Color samples are available from samples.graphics@averydennison.com, or through your sales or customer service contact. Reference Instructional Bulletin 1.30 for zones by geographic location.

NOTE: Some color fade may occur in severe environmental areas. Reference IB 1.30 for durability guidelines.

Colors Cross Reference - Opaque:

KR = Kraft liner SF = StaFlat liner

SC950 Series Name	Vertical Durability Zone 1 Years
SC900-103-O Clear Perm SF	10
SC900-108-O Cover White Perm SF	12
SC900-190-O Black Perm SF	12

NOTE: Some color fade may occur in severe environmental areas. Reference IB 1.30 for durability guidelines.

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Discontinued Colors:

SC900 Opaque Series Name	Vertical Durability Zone 1 Years	Date	SC900 Opaque Series Name	Vertical Durability Zone 1 Years	Date
SC900-202-O Luminous Yellow Perm KR					
(pigmented adhesive)	10	01/01/16	SC900-709-O Light Sage Perm KR	10	01/01/16
SC900-406-O Pantone [®] 032 C Perm KR					
(pigmented adhesive)	6	01/01/16	SC900-905-O Parchment Perm KR	10	01/01/16
SC900-540-O Plum Perm KR	10	01/01/16	SC900-935-O Putty Perm KR	10	01/01/16
SC900-657-O Pantone [®] 292 C Perm KR (pigmented adhesive)	8	01/01/16	SC900-952-O Pantone [®] 466 C Perm KR (pigmented adhesive)	8	01/01/16
SC900-511-O Pantone [®] Proc Magenta C Perm KR (pigmented adhesive)	6	01/01/17	SC900-732-O Lime Aid Perm KR	10	01/01/17
SC900-535-O Raspberry Perm KR	10	01/01/17	SC900-755-O Vibrant Green Perm KR (pigmented adhesive)	4	01/01/17
SC900-605-O Copenhagen	10	01/01/17	SC900-940-O Camel Perm KR	10	01/01/17
SC900-101-O White Perm KR (blue liner)	12	03/20/18	SC900-230-O Medium Yellow Perm KR (pigmented adhesive)	4	03/20/18
SC900-102-O Matte White Perm KR (blue liner)	12	03/20/18	SC900-240-O Sunflower Yellow Perm KR (pigmented adhesive)	10	03/20/18
SC900-103-O Clear Perm KR	10	03/20/18	SC900-250-O Dark Yellow Perm KR	10	03/20/18
SC900-104-O Matte Clear Perm KR	10	03/20/18	SC900-253-O Imitation Gold Perm KR	10	03/20/18
SC900-105-O True White Perm KR (blue liner)	12	03/20/18	SC900-315-O Tangerine Perm KR	10	03/20/18
SC900-180-O Matte Black Perm KR	12	03/20/18	SC900-355-O Apricot Perm KR	10	03/20/18
SC900-190-O Black Perm KR	12	03/20/18	SC900-360-O Orange Perm KR	10	03/20/18
SC900-205-O Butter Perm KR (pigmented adhesive)	10	03/20/18	SC900-362-O Pantone [®] 021 C Perm KR (pigmented adhesive)	6	03/20/18
SC900-206-O Pantone [®] Proc Yellow C Perm KR (pigmented adhesive)	6	03/20/18	SC900-380-O Bright Orange Perm KR	10	03/20/18
SC900-216-O Pantone [®] 109 C Perm KR (pigmented adhesive)	6	03/20/18	SC900-404-O Warm Red Perm KR (pigmented adhesive)	10	03/20/18
SC900-220-O Canary Yellow Perm SF	10	03/20/18	SC900-405-O Pantone [®] 1797 C Perm KR (pigmented adhesive)	8	03/20/18
SC900-418-O Luminous Red Perm KR (pigmented adhesive)	10	03/20/18	SC900-417-O Real Red Perm KR	10	03/20/18
SC900-421-O Pantone [®] 485 C Perm KR (pigmented adhesive)	6	03/20/18	SC900-695-O Dark Blue Perm KR	10	03/20/18
SC900-425-O Tomato Red Perm KR	10	03/20/18	SC900-697-O Dark Navy Blue Perm KR	10	03/20/18
SC900-430-O Cardinal Red Perm SF	10	03/20/18	SC900-705-O Dark Aqua Perm KR	10	03/20/18
SC900-445-O Fire Red Perm KR (pigmented adhesive)	10	03/20/18	SC900-710-O Spectra Everglade Perm KR	10	03/20/18
SC900-450-O Dark Red Perm KR	10	03/20/18	SC900-715-O Real Teal Perm KR	10	03/20/18
SC900-460-O Spectra Red Perm KR (pigmented adhesive)	10	03/20/18	SC900-720-O Teal Perm KR	10	03/20/18
SC900-465-O Apple Red Perm KR	10	03/20/18	SC900-726-O Pantone [®] 354 C Perm KR	8	03/20/18

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			(pigmented adhesive)		
SC900-470-O Burgundy Perm KR	10	03/20/18	SC900-730-O Dark Teal Perm KR	10	03/20/18
SC900-480-O Burgundy Maroon Perm KR	10	03/20/18	SC900-733-O Aquamarine Perm KR	10	03/20/18
SC900-513-O Pantone [®] Violet C Perm KR (pigmented adhesive)	6	03/20/18	SC900-734-O Pantone [®] 375 C Perm KR (pigmented adhesive)	4	03/20/18
SC900-515-O Blossom Perm KR		03/20/18			03/20/18
(pigmented adhesive)	6		SC900-760-O Apple Green Perm KR	10	
SC900-530-O Magenta Perm KR	10	03/20/18	SC900-765-O Olive Green Perm KR	10	03/20/18
SC900-550-O Deep Purple Perm KR	10	03/20/18	SC900-770-O Kelly Green Perm KR	10	03/20/18
SC900-565-O Purple Perm KR	10	03/20/18	SC900-772-O Grow Green Perm KR	10	03/20/18
SC900-575-O Lavender Perm KR	10	03/20/18	SC900-775-O Bright Green Perm KR	10	03/20/18
SC900-606-O Copenhagen Perm KR	10	03/20/18	SC900-785-O Forest Green Perm KR	10	03/20/18
SC900-615-O Cadet Blue Perm KR	10	03/20/18	SC900-790-O Deep Green Perm KR	10	03/20/18
SC900-620-O Shadow Blue Perm KR	10	03/20/18	SC900-793-O Dark Green Perm KR	10	03/20/18
SC900-625-O Majestic Blue Perm KR	10	03/20/18	SC900-795-O Polo Green Perm KR	10	03/20/18
SC900-626-O Pantone [®] 285 C Perm KR (pigmented adhesive)	8	03/20/18	SC900-804-O Pewter Perm KR	10	03/20/18
SC900-628-O Pantone [®] 286 C Perm KR (pigmented adhesive)	8	03/20/18	SC900-810-O Light Gray Perm KR	10	03/20/18
SC900-630-O Olympic Blue Perm KR	10	03/20/18	SC900-820-O Palm Oyster Perm KR	10	03/20/18
SC900-635-O Nautical Blue Perm KR	10	03/20/18	SC900-825-O Light Ash Gray Perm KR	10	03/20/18
SC900-640-O Light Blue Perm KR	10	03/20/18	SC900-830-O Slate Gray Perm KR	10	03/20/18
SC900-645-O Peacock Blue Perm KR	10	03/20/18	SC900-835-O Medium Gray Perm KR	10	03/20/18
SC900-650-O Powder Blue Perm KR	10	03/20/18	SC900-855-O Dark Gray Perm KR	10	03/20/18
SC900-652-O Butterfly Blue Perm KR	10	03/20/18	SC900-860-O Medium Marine Gray Perm KR	10	03/20/18
SC900-655-O Medium Blue Perm KR	10	03/20/18	SC900-869-O Pantone [®] 877 C Perm KR (pigmented adhesive)	6	03/20/18
SC900-659-O Pantone [®] 293 C Perm KR (pigmented adhesive)	8	03/20/18	SC900-910-O Almond Perm KR	10	03/20/18
SC900-665-O Intense Blue Perm KR	10	03/20/18	SC900-920-O Beige Perm KR	10	03/20/18
SC900-670-O Vivid Blue Perm KR	10	03/20/18	SC900-921-O Dark Beige Perm KR	10	03/20/18
SC900-675-O Interstate Blue Perm KR	10	03/20/18	SC900-960-O Terra Cotta Perm KR	10	03/20/18
SC900-678-O Pantone [®] 300 C Perm KR (pigmented adhesive)	8	03/20/18	SC900-965-O Sandstone Perm KR	10	03/20/18
SC900-679-O Pantone [®] Reflex Blue C Perm KR (pigmented adhesive)	8	03/20/18	SC900-970-O Buckskin Perm KR	10	03/20/18
SC900-680-O Sapphire Blue Perm KR SF	10	03/20/18	SC900-978-O Cocoa Perm KR	10	03/20/18
SC900-682-O Pantone [®] Process Blue C Perm KR (pigmented adhesive)	8	03/20/18	SC900-995-O Brown Perm KR	10	03/20/18
SC900-690-O Light Navy Perm KR	10	03/20/18			03/20/18

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Special Considerations:

Because of the unique properties and varieties of glass, special considerations must be considered for windows and graphic applications. Avery Dennison accepts no liability for glass breakage.

- Glass absorbs heat when exposed to sunlight. The degree of absorption across windows can vary because of shading, heating, and cooling ventilation, and insulation from window frames. These temperature differences across the window produce stress, which can cause glass breakage. The ability of glass to resist breakage because of temperature stress is affected by window size, glass thickness, glass treatments, quality, and design.
- Window cleaning methods also vary, from the type of cleaners used, to the washing methods employed. Specific chemicals used in window cleaners may affect the adhesion of pressure-sensitive graphics. Power washing methods may impact the adhesion of graphics, if the water pressure or temperature exceeds the graphics adhesion capability.

Revisions are italicized

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