

Series S-9700 Delineators

Pressure-sensitive Adhesive

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Description:

Avery Dennison® S-9700 Delineator Series offers the highest level of prismatic reflectivity in order to mark obstructions within or adjacent to the road to make them more distinguishable to a driver. Specific uses include distinguishing potential roadside hazards such as ramps, islands, and other obstructions or for use as guideposts such as golf course, fire hydrant, and snow plow markers. The Avery Dennison® S-9700 Series is available in red and yellow.

Construction:

Face Film	Acrylic prismatic retroreflective film
Adhesive	Permanent, pressure-sensitive
Colors	Red and Yellow

Physical Properties:

The following information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. They are given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Data represents averages and is not intended for use as a specification.)

Outdoor Durability	7 years
Minimum Surface/Ambient Air Application Temperature	50° F (10° C)
Application Surface	Recommended for flat, painted or unpainted, metal surfaces.
Typical Applications	Roadside markers
Converting Methods	Die cut
Service Temperature Range	-40° to 180° F (-40° to 82° C) Reasonable range of temperatures that would be expected under normal environmental time and temperature conditions.
Typical Film Caliper w/Adhesive	19-22 mil
Typical Coefficient of Retroreflection	Red Yellow Reflectivity meets or exceeds SAE J594 specification requirements for reflectors.

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Warranted Photometric Performance:

Minimum Candlepower per incident footcandle for a reflex reflector*. Tested in accordance with SAE J594- Jul95.

Observation Angle	Entrance Angle	Red	Yellow
0.2°	0° deg	11	28
	10° deg Up	9	23
	10° deg Down	9	23
	20° deg Left	7	17.5
	20° deg Right	7	17.5
1.5°	0° deg	0.90	2.3
	10° deg Up	0.09	0.23
	10° deg Down	0.09	0.23
	20° deg Left	0.08	0.2
	20° deg Right	0.08	0.2

* Circular reflector with a 3" diameter or a 2" x 3" rectangular reflector.

Colors & Specification Limits (Daytime):

The initial daytime (Illuminant A light source) color of S-9700 Series Sheeting shall conform to the requirements identified in the table below. Tested in accordance to SAE J578 test method 4.1.3 {45/0 (or equivalent 0/45) geometries, CIE illuminant A, and the 1931 CIE 2-degree standard observer.} Values are based off of calculations and are only estimates. Refer to SAE J578 for details.

Color	Intersecting equations		
Red	$y = 0.33$	$y = 0.98 - x$	
Yellow	$y = 0.58x + 0.14$	$y = 1.29x - 0.10$	$y = 0.97 - x$

Color	1	1	2	2	3	3	4	4
	x	Y	x	Y	x	y	x	y
Red	0.67	0.33	0.65	0.33	0.736	0.264	0.716	0.262
Yellow	0.544	0.456	0.525	0.445	0.467	0.503	0.48	0.52

The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with CIE Standard Illuminant A.

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