

Avery® SF 100-120-S Glow in the Dark

Permanent Kraft

(formerly: A0820-S Glow in the Dark)

Revision: New Dated: 02/02/2009

Uses:

Avery Graphics™ Glow-in-the-Dark Film is a specialty photoluminescent non-coated rigid polyester film that can be used for exit and directional signs, identification of fire alarms, fire extinguishers and evacuation routes. This product performs in accordance with ASTM 2030-06: Recommended Uses of Photoluminescent Safety Markings., meets ASTM® E2072-04 Standard Specification for Photoluminescent (Phosphorescent) Safety Markings



Face: 8 mil (202 microns) specialty polyester



Adhesive: Clear Permanent



Liner: 78# bleached Kraft



Durability: Up to 5 years
INDOOR USE ONLY

Application Surfaces:

Flat

Features:

- High gloss finish
- Dimensionally stable liner for easy converting
- Excellent dimensional stability
- Non-toxic, non-radioactive
- Uses zero electricity

Conversion:

- Thermal Die-Cutting
- Flat Bed Sign-Cut
- Drum Roller Sign-Cut
- Steel Rule Die-Cutting

- Thermal Transfer
- Screen Printing
- Cold Overlaminating
- Water based inkjet

- Solvent based inkjet
- Mild/Eco Solvent inkjet
- UV inkjet

Common Applications:

Safety Signs
Emergency Exit Markings
Evacuation Signs

Illuminate Pathways
Location Signs

Product Data Sheet

Page 1 of 4



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Physical Characteristics:

Property	Value
Caliper, face	8 mil (202 µm)
Caliper, adhesive	1.0mil (25 µm)
Dimensional stability	<0.15"(0.4mm)
Tensile at Yield	4.0 - 8.0 lb/in (0.7-1.5 kg/cm)
Elongation	100% min.
Gloss	DOL 1060 - 90
Adhesion: 24 hr.	5.5 lbs/in (963 N/m)
1 week	6.25 lbs/in (1094 N/m)
Flammability	Self Extinguishing
Shelf-Life	1 year
Durability	Vertical Exposure Unprinted – 9 years Printed - Up to 5 years
Min. Application Temperature	45°F (7°C) Flat & Flat w/Rivets 50°F (10°C) Corrugations
Service Temperature	-50° - 180°F (-45° - 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.

Important:

Information on physical and chemical characteristics are based on tests believed to be reliable. The values are intended only as a source of information. This information is given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of any material for their specific purpose. (Data represents average values where applicable, and is not intended for specification purposes)

Warranty:

All statements, technical information 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 with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either one year (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. 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 to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

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.

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Product Data Sheet

Page 2 of 4

Graphics & Reflective Products Division
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Dimensional stability:

Is measured on a 6" x 6" (150 x 150 mm) aluminum panel to which a specimen has been applied; 72 hours after application the panel is scored in a cross pattern, exposed for 48 hours to 150°F (65°C), after which the shrinkage is measured.

Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel panel, 24 hours after the specimen has been applied under standardized conditions. Initial adhesion is measured 15 minutes after application of the specimen.

Flammability:

A specimen applied to aluminum is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

REAGENT	7 DAY IMMERSION	DIP TEST	RUB TEST
30% Sulfuric Acid	NE	NE	NE
10% Sulfuric Acid	NE	NE	NE
30% HCL	NE	NE	NE
10%HCL	NE	NE	NE
50% NaOH	F	NE	NE
10% NaOH	F	NE	NE
MEK	F	F	F
Acetone	F	F	F
Methanol	F	F	F
Isopropyl Alcohol	F	F	F
ASTM #3 Oil	NE	NE	NE
SAE 20 Oil	NE	NE	NE
Toluene	F	NE	F
Mineral Spirits	NE	NE	NE
Glacial Acetic Acid	F	F	F
5% Acetic Acid	NE	NE	NE
Diesel Fuel	NE	NE	NE
Heptane	NE	NE	NE
10% NaCL	NE	NE	NE
Turpentine	NE	NE	NE
Kerosene	F	NE	NE
DI Water	NE	NE	NE
Gasoline	F	NE	F

NE = No Effect

F = Failed (affected sample)

7 Day Immersion: Immersed in reagent for 7 days. Dip Test: Five 10 minute dips in reagent with 30 minute recovery. Rub Test: Rubbed sample for 1 minute with swab soaked in reagent

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Page 3 of 4

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**Illuminescent
Characteristics:**

Charge time of 5 minutes @ 1000 Lux will charge the sign for +10 hours of glow time.
Consistent glow life and unlimited rechargability throughout service life.

Illumination: 21.6 Lux (2 foot candles) for 2 hours with a 4100K cool white fluorescent lamp

Luminence time (after illumination):

10 minutes > 25 mcd/square meter

60 minutes > 5 mcd/square meter

90 minutes > 3 mcd/square meter

CS-17 wheels, 1000g weights

Withstands up to 9000 cycles

Tested U.S Federal test Method Std. No. 191A, Method 5306

Abrasion Resistance:

Relevant Standards:

Meets or exceeds the following standards. ASTM E-2072-00 / ASTM E-2073-00, ASTM E-162, ASTM E-648, ASTM E-662, IMO Resolution A.752(18), ISO/CD 15370, Marine Safety Committee MSC.27(61), DIN 67 510 (Parts 1 - 4), and PSPA Standard 002 Part 2.

Meets OSHA 1910.37, Lloyd's Register SAS F050294.p

Revisions are italicized

Trademarks:

ANSI: American National Standards Institute (U.S.A.)

ASTM: American Society for Testing and Materials (U.S.A.)

PSPA: Photoluminescent Safety Products Association

DIN: Deutsches Institut für Normung

IMO: International Maritime Association

OSHA: Occupational Safety & Health Administration

Fed. Spec.: United States Federal Specification (U.S.A.)

PSTC: Pressure Sensitive Tape Council (U.S.A.)

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Page 4 of 4

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