

# Technical Data Sheet



16450 Southpark Drive  
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## DuraMark 8PW11 Durable Label Specification

**Technical Name:** FPW1Base- S1PC1Over

**Product Description:** 1 mil. Clear UV Inhibited Polyester with 1.0 mil premium permanent acrylic adhesive combined with 2.0 mil polyester base material with 1.0 mil premium permanent acrylic adhesive providing exceptional dimensional stability, tear, heat, cold, UV ray, and outdoor weathering resistance. This product has a gloss finish for enhanced appearance and is ideal for applications where high performance, abrasion resistance and weatherability is required. The adhesive is excellent for both high and low surface energy substrates and provides resistance to petrol chemicals, acids, organic solvents, oils, detergents, and other chemical contaminants.

**Common Use & Markets:** This material is suitable for rugged outdoor or indoor applications on metal and plastics. Common applications are safety decals, instructional decals, and nameplates for durable goods. Material exceeds industry standards for durability. Ideal for industrial manufacturing, automotive, construction and commercial equipment, batteries, agricultural equipment, material handling equipment, HVAC, consumer products, scientific and medical equipment applications. For use on smooth and moderately textured surfaces.

**Face Material Description (overlamine):** S1PC1Over. This is a 1.0 mil UV blocking clear polyester film coated with a 1.0 mil premium clear acrylic adhesive.

### Physical and Performance properties:

Physical Property	Value	Test Method
Caliper	1.5 Mil	
Tensile Strength (MD)	24500 PSI	ASTM D 882
Heat Shrinkage (MD)	0.0%	24-hour dwell time on aluminum panel then 24 hours at 160°F (71°C).
Heat Shrinkage (TD)	0.0%	24-hour dwell time on aluminum panel then 24 hours at 160°F (71°C).

**Base Material Description:** FPW1Base. This is a 2.0 mil white top coated polyester with a 1.0 mil premium clear acrylic adhesive.

### Physical Properties and Performance:

Physical Property	Value	Test Method
Caliper	2.5 Mil	
Tensile Strength (MD)	19000 PSI	ASTM D 882
Heat Shrinkage (MD)	0.0%	24-hour dwell time on aluminum panel then 24 hours at 160°F (71°C).
Heat Shrinkage (TD)	0.0%	24-hour dwell time on aluminum panel then 24 hours at 160°F (71°C).

**Liner Description:** 60# Poly-Coated 2-Sided Brown Liner designed for superior lay flat performance

**Material Certification Testing:** Tests described below were conducted per the ASTM called out or on powder coated metal and polypropylene substrates. DuraMark Material passed all test requirements listed below with excellent results.

Test - ASTM D 903 – Peel test 180° (Modified for 72 hr dwell time)	72 Hours
Stainless Steel	55 Oz/in (605 N/M)
Polypropylene	15 Oz/in (165 N/M)
Acrylic	77 Oz/in (847 N/M)
Glass	68 Oz/in (748 N/M)

Physical Property	Value
Coat Weight	1.0 mil.
Adhesive System	Permanent Pressure Sensitive Adhesive
Min. Application Temp.	10°C/50°F
Service Temp. Range	-40°C to 150°C -40°F to 302°F

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Test	Spec.	Results
Abrasion - Taber	Wheels: CS 10 Weight: 500 g Cycles: 200	Excellent
Resistance to Fluids, Detergent, Engine Oil Brake Fluid, windshield fluid, Fuel, Ethanol Dipping/Rubbing	4 hours at 23°C / 73.4°F	Excellent
Humidity Resistance	144 Hours at 38°C±2°C / ~100% RH	Excellent
Temperature Cycle Resistance 120°C	30 minutes 120°C / 248°F 15 minutes 23°C / 73.4°F 30 minutes -30°C / -22°F 15 minutes 23°C / 73.4°F	Excellent
Heat Aging	7 Days 120°C / 248°F	Excellent
Weather Resistance - UV Exposure 1500 hours	600 kJ/m <sub>2</sub>	Excellent
High Pressure Cleaning	Fan Angle: 15° Nozzle distance: 200mm Angle of Impingement: 45° Duration of Impingement: 5 seconds	Excellent

**Regulatory Compliance:** This material is compliant with RoHS, REACH and California Proposition 65.

**Country of Origin:** USA

**Expected Life:** 7 years plus (product will exceed this indoors and will vary in outdoor applications due to climate conditions)

**Storage Stability:** Two years when stored at 70 F (21C) and 50% relative humidity.

**Technical Product Information:** This product specific information is based upon information provided to DuraMark Technologies by its raw material suppliers and DuraMark makes no independent representations or warranties, expressed or implied, and assumes no liability in connection with the use of this information.

### Warranty:

DuraMark Technologies products are sold with the understanding that the purchaser will test them in actual use and determine independently if the products or materials meet their intended use requirements. DuraMark warrants to its customers that its products are free from defects in material and workmanship. DuraMark limits its obligation under this warranty to replacement of the product shown to DuraMark's satisfaction to have been defective at the time of purchase. This warranty does not extend to any person obtaining the product from DuraMark's customer. Under no circumstance will DuraMark be liable for any loss, damage, expense, or consequential damages of any kind arising from or connection with the use, or inability to use DuraMark's product.