

1180 SERIES

EPOXY TRAFFIC PAINT



PRODUCT DESCRIPTION

1180 Series is a two-component epoxy based pavement marking system suitable on both asphalt and concrete roadways. It provides outstanding durability and long-term performance. The 100% solids system is formulated free of heavy metal pigments, making 1180 Series not only durable, but environmentally friendly as well.

1180 Series is ideal for spray application to Portland Cement Concrete (PCC) and asphalt surfaces. Applications include centerline, edge line, lane line, chevron and intersection markings.

1180 Series is available in white, yellow and black and can be reflectorized with glass beads.

TECHNICAL DATA

PROPERTY	TEST METHOD	SPECIFICATIONS
Percent Solids	ASTM D1353	100%
Titanium Dioxide (White), by weight	ASTM D476, Type II	18-25%
Organic Yellow, by weight		5-10%
Epoxy Equivalent Weight	ASTM D1652	290 ± 50
Total Amine Value	ASTM D2074	475 ± 50
No track time @ 77° F / 25° C, with glass beads	ASTM D711	10 minutes maximum
Adhesion to concrete, 100% concrete failure	ASTM D4541	600 psi minimum
Hardness (Shore D)	ASTM D2240	80 minimum
Abrasion resistance	ASTM D4060	<80 mg weight loss
Tensile strength	ASTM D638	>6,000 psi
Compressive strength	ASTM D695	>12,000 psi
Yellowness index	ASTM D1925 QUV per ASTM G53	6 max before QUV 25 max after QUV

Color: Federal Standard 595B, White: 17925, Yellow: 13538

- **Part A:** 1180 White, 1186 Yellow, 1187 Black
- **Part B:** 1185 Epoxy Catalyst

ADVANTAGES

- 100% solids, 2:1 by volume mix ratio
- Good UV stability
- Exceptional adhesion to concrete and asphalt
- Low viscosity for smooth application with minimal overspray
- Outstanding abrasion and corrosion resistance
- Excellent bead adhesion for better reflectivity
- Excellent moisture resistance

COVERAGE

240 linear ft. per gallon @ 20 mils, 4" width

PACKAGING

- 55 gallon drums
- 250 gallon tote

TEMPERATURE	HARDENER	WHITE	YELLOW
100° F (38 °C)	1159	860	1189
105° F (40 °C)	907	685	931
110° F (43 °C)	713	543	741
115° F (46 °C)	567	430	591
120° F (49 °C)	450	346	478
125° F (52 °C)	361	280	389
130° F (54 °C)	291	230	325
135° F (57 °C)	234	190	271
140° F (60 °C)	189	158	230
145° F (63 °C)	155	133	197

HIGH SHEAR VISCOSITY CHART (the values are in centipoises (mPa·s))

INSTALLATION & SURFACE PREPARATION

Placement

1180 Series and retro-reflective media shall be placed according to SWARCO Colorado Paint requirements. All technical data regarding material type and application rate will be provided to the project engineer prior to starting work. 1180 Series shall be applied at a minimum of 20 mils film thickness.

Surface Preparation

The surface shall be clean and dry. Tape a 12-inch square sheet of thin plastic to the road surface, being careful to seal all edges. After 15 minutes, examine the bottom of the sheet and the road surface. If more than a sparse amount of moisture is present, do not apply. The surface preparation shall include, but not be limited to, cleaning and removal of sealing and curing compound. All pavements and temporary paint markings shall be cleaned free of grease, oil, dirt, grass, loose gravel, loose or flaking paint and other materials prior to the application of 1180 Series product.

The pavement surface area to be prepared shall be wider than the 1180 Series to be applied, such that a prepared area is on all sides of the 1180 after application. New asphalt, concrete and seal coated surfaces shall be in place a minimum of two weeks prior to marking application.

Any existing marking which may interfere with the performance of the material shall be physically removed by any Agency approved method except for the use of chemicals. All new PCC surfaces shall have all curing compound removed. All existing markings shall be at least 90% removed. 1180 Series can be applied over temporary waterborne paint markings which are well adhered to the substrate and are 8 mils dry or less when prepared according to paragraph 1 in this section.

- **Final Surface Preparation**

Upon completion of the surface preparation, the pavement surface shall first be power broomed and vacuumed. An additional compressed air operation, separate from the compressed air guns on the striping applicator, shall be used to remove residue and debris resulting from the cleaning work. Compressed air shall be used during striping application.

- **Weather Conditions**

Ambient and surface temperature shall be 40°F and rising. The pavement surface temperature and ambient temperature shall be determined and documented before the start of each day of marking operation and at any other time deemed necessary by the manufacturer or the agency.

- **Equipment**

1180 Series shall be applied with equipment approved by SWARCO Colorado Paint. The equipment shall be designed to control the viscosity of the material accurately at the spray gun. This equipment shall have pressure gauges for each proportioning pump. The equipment shall have a metering device to register the accumulated footage for each spray gun or a gallon meter to determine actual gallons used. Each piece of equipment shall be operated by a technician who is an expert in that particular equipment's operation and plural component application techniques.

- **Glass Beads**

Spherical glass beads shall be used as reflective media in 1180 Series. The glass spheres shall be colorless, clean, transparent and free of excessive air bubbles. The surface of the spheres shall not exhibit any scarring or scratching.

There shall be two gradation types of glass spheres used in the 1180 Series epoxy pavement marking material. The large glass spheres shall conform to the AASHTO M-247 Type 4 gradation described in the Standard specification for Construction of Roads and Bridges on Federal Projects FP-96, Section 718.19. The small glass spheres shall conform to the AASHTO M-247 Type 1.

STORAGE

Store both components of 1180 in a dry area. Avoid excessive heat and do not freeze. The shelf life is two years in the original, sealed container.

WARRANTY

SWARCO Colorado Paint, LLC warrants to the purchaser that this product shall be manufactured without defects when applied according to SWARCO Colorado Paint Application Instructions. This warranty covers material replacement only. Excluded from coverage is labor, any damage to the application surface or any failure of the coating caused other than by defects within the material. Because the conditions of use are beyond our control, SWARCO Colorado Paint shall not be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product herein.

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy and completeness thereof is not guaranteed. Data is subject to alteration due to technical advances.

Above information not to be taken as a warranty or representation for which we assume legal responsibility. It is offered solely for consideration, investigation and verification.

If you have any questions about proper application techniques or other technical support issues, please contact your SWARCO sales or customer service representative.

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