Polymer Alloy 2000SD

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	100% Solids Static Dissipative Novolac Epoxy
Description	A static dissipative, semi self-leveling novolac epoxy floor topping engineered to instill electrostatic control characteristics. This product uses a moisture-tolerant primer to achieve a strongly bonded monolithic topping with moderate chemical resistance to splash and spillage, and good physical and mechanical properties.
Features	• Dissipative in the range of 1 x 10^6 to 10^9 ohms • Meets all VOC requirements • Low odor/Solvent-free compliant • USDA compliant • Stain-resistant with good cleanability • Can be broadcast into for non-skid surface (conductive aggregate only)
Typical Uses	• Semi-conductor facilities • Electrical vehicle battery plants • Food processing floors • Laboratories • Pharmaceutical plants • Wastewater treatment facilities • Aisleways • Hangers
Color	Grey (0766) Limited color options available upon request.
Primer	Primer 67SD
Dry Film Thickness	20 - 50 mils (508 - 1270 microns) per coat
Solids Content	By Volume 100% +/- 0%
Theoretical Coverage Rate	1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns) 80 ft²/gal at 20.0 mils (2.0 m²/l at 500 microns) 32 ft²/gal at 50.0 mils (0.8 m²/l at 1250 microns) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 0 g/l
Chemical Resistance	• Dilute Inorganic Acids • Dilute Alkali Solutions • Aliphatic Organic Solvents • Mineral Oils • Salt Solutions Resistant to splash and spillage of the above chemicals. Not for use in immersion.
Topcoats	**Optional Sealers:** If enhanced scuff and scratch resistance is desired, use a Dudick static dissipative sealer as recommended by your Dudick or Carboline representative or technical service.

SUBSTRATES & SURFACE PREPARATION

Concrete

Concrete must be prepared mechanically to remove surface laitance. Oils, grease or other contaminant must be removed prior to surface preparation. Concrete must be free of curing compounds and form release agents (per SSPC SP-13/NACE No.6). Surface texture should be similar to 40-60 grit sandpaper or the visual standard, CSP 3-5 from the International Concrete Repair Institute (ICRI) with pea gravel exposed. The prepared surface shall have a minimum tensile strength of 250 PSI per ASTM D7234.

All concrete substrates must be checked for moisture and pass the ASTM D4263 Plastic Sheet Test prior to product application.

PERFORMANCE DATA (TYPICAL VALUES)

Test Method	Results
Compressive Strength ASTM C-579	6,000 PSI
Flame Spread ASTM D-635	<5 mm
Flexural Strength ASTM C-580	1,800 PSI
Resistivity	10^6 – 10^9 Ohms
Shore D Hardness ASTM D-2240	65 -70
Taber Abrasion ASTM D-4060	69 mg
Tensile Bond Strength ASTM D-7234	Cohesive Failure of Concrete
Tensile Elongation	15 - 20%
Tensile Strength ASTM C-307	2,200 PSI
Tensile Strength ASTM D-638	7,200 PSI

MIXING & THINNING

Mixing

Mix Part A for 1-2 minutes to assure that any pigment or filler which may have settled is redispersed so that a uniform color is achieved, prior to adding Part B. Combine Part A and Part B; stir mechanically for approximately 2-3 minutes. Thoroughly scrape the sides and bottom of the container and re-mix for another 30 seconds to achieve a uniform color and consistency.

DO NOT MIX PARTIAL KITS.

Ratio

1.38:1 ratio by volume (A:B)

Pot Life

50-60 minutes @ 50ºF (10ºC)
30-40 minutes @ 75ºF (24ºC)
20-30 minutes @ 90ºF (32ºC)

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Application Procedure

Once mixed, pour directly onto the primed concrete. The mix should be spread to a minimum 20 mil thickness with a serrated squeegee, notched trowel or gauge rake. After spreading the material to the proper thickness, backroll and roll with a porcupine roller to level and de-aerate.

To terminate work, use duct tape to set a straight edge and remove the tape when the topping becomes slightly tacky.
Start the next work period butting into this area. Permanent terminating lines should be made into the saw cuts in the concrete.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	110°F (43°C)	110°F (43°C)	110°F (43°C)	90%

Substrate temperature must be 5ºF (3ºC) above the Dew Point.

CURING SCHEDULE

Surface Temp.	Dry to Recoat	Dry Time (Light Foot Traffic)	Maximum Recoat Time	Cure Time
50°F (10°C)	30 Hours	30 Hours	72 Hours	72 Hours
75°F (24°C)	16 Hours	16 Hours	24 Hours	24 Hours
90°F (32°C)	10 Hours	10 Hours	20 Hours	20 Hours

CLEANUP & SAFETY

Cleanup

Use S-10 Cleaning Solvent or Thinner 2 to clean tools and equipment.

Safety

Read and follow all caution statements on this product data sheet and on the SDS. Employ normal safety precautions. Keep container closed when not in use.

Ventilation

Ventilation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. User should test and monitor exposure levels to insure all personnel are below guidelines. Use MSHA/NIOSH approved air respirators as needed.

Caution

Fire and explosion hazards: This product contains less than 1% volatile components, however, vapors are heavier than air and can travel long distances, ignite and flash back. Eliminate all Ignitions sources. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Packaging	**5 Gallon Kits:** Part A: 2.9 Gallons (in a 5 gal pail) Part B: 2.1 Gallons (in a 3.5 gal pail) **1 Gallon Kits:** Part A: 0.58 Gallons (in a 1 gal pail) Part B: 0.42 Gallons (in a 1 gal pail)
Shelf Life	Part A: 30 days Part B: 30 days
Storage	Warning: All Dudick products classified by DOT labels as either white, yellow or red labels must not be mixed or stored together as an explosive reaction may occur. Store all products in a cool, dry area away from open flames, sparks or other hazards.

WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.