

SELECTION & SPECIFICATION DATA

Generic Type	100% Solids, Conductive, Semi-Self Leveling Epoxy
Description	A 100% solids, multi-functional semi-self leveling epoxy floor topping. Polymer Alloy 2000C uses a moisture-tolerant conductive primer and a flexible conductive semi-self leveling topcoat to achieve a strongly bonded flooring system with moderate chemical resistance, good physical and mechanical properties and static discharge properties.
Features	<ul style="list-style-type: none"> • Meets all VOC requirements • Conductive • Low odor • Semi-self leveling to a high gloss finish at 20 mils • Stain resistant with good cleanability • Conductive anti-skid available
Typical Uses	<ul style="list-style-type: none"> • Food Processing Floors • Laboratories • Pharmaceutical Plants • Waste Water Treatment Facilities • Aisleways • Printed Circuit Board Facilities
Color	Medium Grey (0766) Other colors may be available upon request. Contact your Carboline representative for availability.
Primer	Primer 67C
Dry Film Thickness	20 - 50 mils (508 - 1270 microns) per coat
Solids Content	By Volume 100% +/- 0%
Theoretical Coverage Rate	1604 ft ² /gal at 1.0 mils (39.4 m ² /l at 25 microns) 80 ft ² /gal at 20.0 mils (2.0 m ² /l at 500 microns) 32 ft ² /gal at 50.0 mils (0.8 m ² /l at 1250 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 0 g/l
Chemical Resistance	<ul style="list-style-type: none"> • Dilute inorganic acids • Dilute alkali solutions • Aliphatic organic solvents • Mineral oils • Salt solutions

Polymer Alloy 2000C

PRODUCT DATA SHEET



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 C579)	6,000 PSI (41.4 MPa)
Flame Spread (ASTM D635)	<5 mm
Flexural Strength (ASTM C580)	1,800 PSI (12.4 MPa)
Resistivity* (ASTM F150, NFPA #99)	$2.5 \times 10^4 - 1.0 \times 10^6$ Ohms
Shore D Hardness (ASTM D2240)	65-70
Taber Abrasion (ASTM D4060)	69 mg
Tensile Bond Strength (ASTM D7234)	Cohesive Failure of Concrete
Tensile Elongation (ASTM C307)	15-20%
Tensile Strength (ASTM C307)	2,200 PSI (15.2 MPa)

*Requires minimum 72 hours to develop this property

MIXING & THINNING

Mixing

Prior to adding Part B, 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. Combine the A and B Parts and 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

1.5:1 (A:B by volume)

Pot Life

30-40 minutes @ 75°F (24°C)

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 specified thickness with a serrated squeegee, notched trowel or gauge rake. The gauge rake is preferred. After spreading the material to the proper thickness, roll with a porcupine roller to level and de-aerate the material.

To insure surface resistivity properties, the components must be applied within 30 days of product manufacture. Please refer to storage instructions.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	60°F (16°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	80°F (27°C)	110°F (43°C)	110°F (43°C)	90%

Substrate temperature must be 5°F (3°C) above the dew point.

CURING SCHEDULE

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

Do not attempt to store mixed material. Residual material should be properly disposed of at the end of each work period. Application in direct sunlight may lead to blistering, pinholes, or wrinkling due to outgassing of air in the concrete and high substrate temperatures. Double priming, shading or evening application may be required.

CLEANUP & SAFETY

Cleanup	Use S-10 Cleaning Solvent 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	1 Gallon Kits: Part A: 0.6 Gallons (in a 1 gal can) Part B: 0.4 Gallons (in a 1 gal can) 5 Gallon Kits: Part A: 3 Gallons (in a 5 gal pail) Part B: 2 Gallons (in a 3.5 gal pail)
Shelf Life	30 days when stored in their original, unopened containers at 50°F-75°F (10°C-24°C). Storage in direct sunlight or excessive heat will reduce working time and shelf life.
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.

Polymer Alloy 2000C

PRODUCT DATA SHEET



PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)	1 Gallon Kit: 15 lbs (6.8 kg)
	5 Gallon Kit: 65 lbs (29.5 kg)

WARRANTY

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