

SELECTION & SPECIFICATION DATA

Generic Type	100% Solids Epoxy
Description	A multi-functional semi-self leveling epoxy floor topping. Polymer Alloy 2000 uses a moisture-tolerant primer and a flexible semi-self-leveling epoxy topcoat to achieve a strongly bonded monolithic topping with moderate chemical resistance to splash and spillage, and good physical and mechanical properties.
Features	<ul style="list-style-type: none"> • Meets all VOC Requirements • Low Odor/Solvent Free Compliant • USDA compliant • Stain Resistant with good cleanability • Can be seeded for anti-skid surface • Can Saturate Fiberglass Reinforcement for Better Crack Bridging Properties
Typical Uses	<ul style="list-style-type: none"> • Food Processing Floors • Laboratories • Pharmaceutical Plants • Waste Water Treatment Facilities • Aisleways • Hangers
Color	Standard Color Chart available upon request.
Primer	Primer 67, Primer 67LV, Primer 67DPLV, Primer 67DTO
Dry Film Thickness	20 - 30 mils (508 - 762 microns) per coat
Solids Content	By Volume 100% +/- 0%
Theoretical Coverage Rate	<p>1604 ft²/gal at 1.0 mils (39.4 m²/l at 25 microns)</p> <p>80 ft²/gal at 20.0 mils (2.0 m²/l at 500 microns)</p> <p>53 ft²/gal at 30.0 mils (1.3 m²/l at 750 microns)</p> <p>Allow for loss in mixing and application.</p>
VOC Values	As Supplied : 31 g/l
Chemical Resistance	<ul style="list-style-type: none"> • Dilute Inorganic Acids • Dilute Alkali Solutions • Aliphatic Organic Solvents • Mineral Oils • Salt Solutions <p>Resistant to splash and spillage of the above chemicals. Not for use in immersion.</p>
Topcoats	Optional Sealers: If enhanced scuff and scratch resistance is desired, optional topcoat and urethane sealers are available. Consult your Dudick or Carboline representative or technical service for recommendations specific to the service environment.

Polymer Alloy 2000

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 C-579	>12,000 PSI
Compressive Strength ASTM D-695	21,000 PSI
Flame Spread ASTM D-635	<5 mm
Flexural Strength ASTM C-580	11,500 PSI
Fungus Resistance	No Growth
Shore D Hardness ASTM D-2240	80 – 90
Taber Abrasion ASTM D-4060	33 mg
Tensile Bond Strength ASTM D-7234	Cohesive Failure of Concrete
Tensile Strength ASTM C-307	5,000 PSI
Tensile Strength ASTM D-638	7,200 PSI
Water Absorption ASTM C-413	0.0324%

MIXING & THINNING

Mixing

Prior to adding part B, mix Polymer Alloy 2000 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

A:B by volume
Part A: 1 gallon
Part B: 48 fl. oz.

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 the Polymer Alloy 2000 directly onto the primed concrete. The mix should be spread to a 20 mil thickness with a serrated squeegee, notched trowel or gauge rake. After spreading the material to the proper thickness, backroll or roll with a porcupine roller to level and deaerate.

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

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 ignition 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: 3.55 Gallons (in a 5 gal pail)
 Part B: 1.45 Gallons (in a 3.5 gal pail)
1 Gallon Kits:
 Part A: 0.71 Gallons (in a 1 gal pail)
 Part B: 0.29 Gallons (in a 1 gal pail)

Shelf Life | 12 months 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 2000

PRODUCT DATA SHEET



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 to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. 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. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.