

SELECTION & SPECIFIC DATA**Generic Type** Polyamide Epoxy**Description**

PANSEAL is a unique, NO VOC, multi-component epoxy system formulated to repair, strengthen and enhance leaking and corroded surfaces with a high strength, 2750 psi adhesion strength coating. PANSEAL is an all-purpose, abrasion proof sealant that can handle extreme chemicals, environmental conditions and will permanently protect the surface as it does not degrade over time. PANSEAL will protect the substrate against future corrosion while encapsulating any rust remaining on the surface. PANSEAL has NO VOCs, NO harsh chemicals, very minimal odor making it the ideal product for schools, hospitals and confined spaces. PANSEAL is widely used for residential (DIY), commercial and industrial projects worldwide.

PANSEAL Models - Same Material - Different Sizes/Options

Model #	Description	Amount	Coverage at 15 mils
2000PC	PANSEAL in a Self-Mixing, Dual-Chamber Cartridge	250g	6 Square Feet
2000BP	PANSEAL in a Burst Pack Bag	250g	6 Square Feet
2000CTR	PANSEAL in a Container	315g	8 square feet
2000PG	PANSEAL Gallons (1 gallon kit - resin/hardener)	1 Gallon	120 Square Feet

* Other sizes/amounts available on request.

Residential, or Small Area Projects:

2000PC, 2000PB and 2000CTR are ideal for corroded drain pans, tank lining repair, containment repair and any project that requires a leak sealing adhesive and protection for a surface up to 6-8 square feet per unit.

Commercial, Industrial Projects:

2000PG: PANSEAL Gallons are used for larger scale projects of over 40 square feet. PANSEAL will cover 160 square feet at 10 mils (minimum required thickness), but can be applied at various thicknesses according to project requirements.

Product Features & Benefits

- Seals Leaks Immediately/Permanently
- Minimal System Down Time
- Very Minimal Odor - Ideal for Schools, Hospitals, Confined Spaces
- Easy Brush/Roll/Spray
- Self-Levelling, Can be Applied Vertically
- 100% Solids, NO Solvents, NO VOCs.
- Works on Metal, Fiberglass, Stainless Steel, Plastic, Concrete & Wood Surfaces
- Excellent Adhesion Strength - 2,750 psi (pull-off adhesion test ASTM D 4541)

Recommended Uses

- Cooling Tower Repair
 - Condenser Pans
 - Tank Linings
 - Secondary Containment Lining
- Leak Repair, Flooring, Pipeline Coating, Clarifiers, Collection Systems, Digesters, Lift Stations, Manholes, General Corrosion Protection, Acid Resistant Linings, Abrasion Resistant Linings and Exterior Finishes

Color/Part # Light Gray, Dark Gray, Black, Blue, Red, White**Finish** Gloss**Primer** Self-priming**Solids Content** By Volume 100%**Theoretical Coverage** 160 ft² at 10 mils thickness, 80 ft² at 20 mils thickness**Dry Temp. Resistance** Continuous: 220°F (104°C) Non-Continuous: 250°F (121°C)
Discoloration and loss of gloss occurs above 200°F (93°C) but does not affect performance.**Under Insulation Resistance**

Continuous: 175°F (79°C)

Elasticity 8%**Specific Gravity** resin: 1.45, hardener .97**SUBSTRATES & SURFACE PREPARATION**

* The cleaner and well-prepared surface will result in optimal adhesion to the substrate.

Model # Description**General** Surfaces must be clean and dry. Remove all dirt, dust, oil and all other contaminants.**Primer** Self priming on most surfaces, but apply Dynesic's DX-1100 Primer prior to PANSEAL on concrete surfaces.

- Metal, Galvanized Many applications can be pressure washed or even scrubbed using a degreaser such as Dynesic's DX-ETCH or with water (if there is no chance of oils or greases remaining on the surface). In more extreme conditions, or depending on surface type, obtaining an etched surface is recommended.
- Stainless Steel Lining products have a difficult time adhering to slick surfaces, however, PANSEAL's 2750 psi adhesion strength allows it to fully adhere to stainless steel. We recommend an etched profile that can be achieved by sand blasting or grinding. Keep in mind that an etched, rather than a polished profile is the goal.
- Concrete/CMU Concrete must be cured 28 days at 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing with PANSEAL Paste Grade (2500PG) to fill and strengthen the substrate. Prime concrete surfaces first with Dynesic DX-1100 Concrete Primer.
- Fiberglass, Wood Clean and apply.

* To coat over previously painted surfaces contact Dynesic's Technical Service Department.

CHEMICAL RESISTANCE

Acetic Acid 10%	Alkalis	Ammonium Hydroxide 25%	Brine Water
Caster Oil	Copper Sulfate	Crude Oil	Diesel Fuel
Ethanol	Ethylene Glycol	Fatty Acids	Fresh, or Non-Potable Water
Gasoline	Hydrochloric Acid 20 %	Mineral Spirits	Potassium Hydroxide 50%
Sewage	Sodium Chloride	Sodium Hydroxide 50%	Sulfuric Acid 75%
Wine			

* Call or email for a complete list of chemical resistance.

MIXING & THINNING

Model # Description

- 2000PC PANSEAL Cartridges are supplied with a self-mixing nozzle attachment. Attach the mixing nozzle and apply with a caulk gun over the surface. As pressure is applied with the caulk gun, the 2 components (resin, hardener) mix together as they spiral through the mixing nozzle.
- 2000BP PANSEAL Burst Packs are easy to mix within the package. Remove the separating plastic clip, mix to obtain full, uniform color, cut off a corner with scissors and apply over the surface.
- 2000CTR Empty the PART B Hardener Container into the PART A Container. Use the stirring stick provided to mix the two parts within the PART A Container, paying attention to the sides and bottom of the container while obtaining a uniform color. Pour the mixed product onto the surface and apply with a brush. Gloves are recommended.
- 2000PG **Mixing:** Power mix part A resin separately, then add part B hardener and power mix. If using a thinner or additive, add and mix to part A prior to adding the hardener (Part B).

Thinning:

- For Sprayer:** Up to 6.5 oz/gal (5%) w/ Acetone or Xylene
- For Brush:** Up to 16 oz/gal (12%) w/ Acetone or Xylene
- For Roller:** Up to 16 oz/gal (12%) w/ Acetone or Xylene

* Use of thinners other than those supplied or recommended by Dynesic may adversely affect product performance and void product warranty, whether expressed or implied.

Ratio	3:1 ratio (A to B) by volume
Pot Life	8 hours 20 minutes at 5°C (41°F)
	2 hours at 25°C (77°F)
	50 minutes at 33°C (92°F)

* Do not keep the blended coating in the original container unless immediate use is planned. Otherwise, exothermic heat created during the curing process will considerably shorten the pot life. Pour the coating into a rolling tray or pour directly onto the surface. Try to keep the depth of the coating in the tray below 3/8".

APPLICATION 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.

Spray Application (General)

PANSEAL is a 100% solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

Airless Spray Plural Component**Tip Size:** .025 – .029 reversible type**Diameter of Part A Fluid Line:** 1/2" ID**Diameter of Part B Fluid Line:** 3/8" ID**Spray Line:** 1/2" ID x 50 feet maximum**Diameter of Whip:** 1/4 – 3/8" ID**Length of Whip:** 20 feet**Power Ratio Pump:** 56:1 or greater**Static Mixer:** 2 x 1/2" ID x 12" in length behind mixing valve**Part A Temperature:** 130 – 135°F in reservoir tank**Part B Temperature:** 90 – 95°F in reservoir tank**Airless Spray Single Leg or Hot Pot****Pump Size:** 56:1 or greater**Hose Length/Diameter:** 50 ft x 3/8"**Whip Length/Diameter:** 10 ft x 1/4"**Work Life:** 4 gallons at 32°C (90°F):**No Thinner:** 25 minutes**3 – 5% Thinner:** 35 – 40 minutes

* Part A resin and Part B hardener should be heated individually to 75 – 85°F before mixing so product will atomize properly according to the optimum viscosity. Mixed product should be sprayed within 20 minutes after mixing.

Brush & Roller (General)

This material may be applied with brush or roller. Be aware of working life when using brush or roller application.

Brush: Use a medium bristle brush.**Roller:** Use a short-nap synthetic roller cover with phenolic core.**CLEANUP & SAFETY****Cleanup** Use MEK or Acetone. In case of spillage, absorb and dispose of in accordance with local, applicable regulations.**Safety** Read and follow all caution statements on this product data sheet and on the MSDS for this product. Wear protective clothing, gloves.**PACKAGING, HANDLING & STORAGE****Shelf Life** 24 months at 75°F (24°C)

* When kept at recommended storage conditions and in original unopened packaging.

Shipping Weight (Approximate)

1 Gallon Kit: 12 lbs. (5.45 kg)

4 Gallon Kit: 50 lbs. (22.73 kg)

50 Gallon Drums: Part A 700 lbs./Part B 450 lbs.

Storage Temperature & Humidity

40° – 110°F (4° – 43°C)

0 – 100% Relative Humidity

Storage Store Indoors. This product is not affected by excursions below these published storage temperatures, down to 10°F, for a duration of no more than 14 days.**PERFORMANCE DATA**

TEST METHOD	SYSTEM	RESULTS
ASTM D-4541 Dry	Blasted Steel 1 ct.	>2,500 psi
ASTM D-4541 Dry	Scuffed FBE 1 ct.	>2,000 psi
ASTM D-4541	Blasted Steel 1 ct.	>2,500 psi
Wet 5 days 70 °C water		
ASTM D 4060 Abrasion	Blasted Steel 1 ct.	80 mg. loss
1000 cycles, CS17		770 cycles per mil
wheel 1000 gm. load		
ASTM C-109	Blasted Steel 1 ct.	10,000 – 13,000 psi
Compressive Strength		
ASTM D-2240 Hardness	Blasted Steel 1 ct.	83 – 90 Shore D

CURE SCHEDULE & RE-COAT WINDOW

<u>TEMPERATURE</u>	<u>MINIMUM RE-COAT</u>	<u>MAXIMUM RE-COAT</u>
10°C (50°F)	8 hours	14 days
25°C (77°F)	4 hours	14 days
60°C (140°F)	1 hour	Not recommended

DYNESIC TECHNOLOGIES

Dynesic produces exceptional chemically engineered coatings, adhesives and sealants offering premium corrosion protection, while being safe for the environment and safe/easy to apply. Dynesic Technologies can be found protecting steel, ductile and concrete substrates worldwide.

