# FLOOR POXY

## PRODUCT SPECIFICATIONS

### FLOORPOXY 9700 - FAST-DRY POLYASPARTIC POLYUREA

**Description**

FloorPoxy 9700 is a two component, high-solids, Fast Dry Polyaspartic Polyurea. The FloorPoxy 9700's quick dry time coupled with its UV resistance, mar resistance, and chemical resistance will outperform most other types of sealers or topcoats. It is available in a 2 hour cure formula.

**Uses**

FloorPoxy 9700 is designed for professional use only and is specified as the finish coat for use in moderate to severe chemical environments or in heavy traffic areas. Apply FloorPoxy 9700 as a coating over Life Paint water base and 100% solids epoxies. FloorPoxy 9700 can also be applied over decorative paint chips and can be used as a sealer on a variety of other substrates such as plain concrete, acrylic cements and Acid Stained Concrete Flooring with moisture vapor pressure under 3.5lbs/1000 ft²/24hr period. Use FloorPoxy on Industrial Floors, Garage Floors, Decorative Floors, Restaurant Floors, Food Processing Facilities, Automotive Service Areas, and other moderate-high traffic areas.

**Advantages**

- SCAQMD VOC Compliant
- Chemical Resistant
- Color and Gloss Retention
- Impact & Abrasion Resistant
- Low Solvent Smell
- Fast Dry Time
- Walk on 6 Hours, Drive on 36 Hours

**Coverage**

250-300 sf per gal over smooth surfaces
200-250 sf per gal over rough surfaces

**Packaging**

1 gallon kits premeasured with ½ gallon of Isocyanate A and ½ gallon of Resin B in 1 gallon cans
10 gallon kits premeasured in two 5 gallon pails

**Inspection**

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 70% (per ASTM F-2170). All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes sprinklers, rain, fog, dew, etc.

***Before starting f ooring work,*** test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran, and cannot be used to predict long-term conditions.

***Calcium chloride tests should be conducted*** to determine if the concrete is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 3.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for a polyurea installation. If the reading is any higher, please consult your Life Paint Salesman for further instructions.

***Failing to adhere to these strict guidelines*** can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. Life Paint bears no responsibility for failures due to any of the above conditions.

**Surface Preparation**

Over Concrete: Concrete should be mechanically profiled by shotblasting or diamond grinding. When using other methods or scarification, make sure it is roughed to feel like 30 grit sandpaper and so that it is porous and contaminant free so the product can soak in and properly bond.

**Over Epoxy or CRU:** Apply directly over new epoxy or Urethane within 24 hours of initial application. When applying over existing epoxy or CRU that has been cured for longer than 24 hours, sand the surface with 100 grit sand paper, remove debris and wipe with acetone just before new application.

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**Mixing**

As Coating over Concrete, Epoxy, or CRU: Before application, FloorPoxy 9700 A-Side and B-Side should be pre-mixed in their individual containers. Add 1 part of the A-Side to 1 part of the B-Side while mixing, using a mechanical mixer (Jiffy Mixer) at low to medium speeds. No thinning is necessary. Mix until a homogeneous mixture and streak-free appearance is attained (approximately 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains.

**Application**

The FloorPoxy 9700 material may be squeegeed, rolled or brushed. Apply product within 24 hours after previous coating is applied. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush or trowel. Leave remaining material in bucket and spread evenly using a 3/8" non-shedding nap roller cover beginning near the cut in area. Apply quickly and avoid overrolling, as product will begin to "tack-up" as it begins to cure.

Re-coat if needed within 24 hours of application to insure adhesion. If a delay occurs, it is recommended that the surface be sanded and wiped clean with acetone before reapplication.

**Maintenance**:

Cleaning the cured Polyurea is best done by mopping surface with mild soap and water or a mild detergent.

For best appearance, Life Paint recommends resealing the surface every 3-4 years. Reseal by lightly sanding existing coating, cleaning surface with acetone, and applying CRU over dry surface using above application specifications

**Limitations**

- Do not apply in temperatures below 50°F or above 90°F.
- Do not apply unless temperature is 5° above the dew point or if rain is expected within 24 hours.
- Do not apply on damp or moist surface as product will whiten and may cause delamination.

- Opened material must be used within 2 days.
- 1 gallon must cover at least 200 sf to properly cure.
- Please read MSDS sheet before use.

**Clean Up**

Equipment should be cleaned with environmentally safe solvent immediately after use.

## FILM PROPERTIES

| | |
|---|---|
| Drying time: (70$^0$F, 50% RH) | |
| Set to touch | <15 min |
| Tack-Free | <20 min |
| Dry Hard | <30 min |
| Reverse Impact | <10 FT-LB |
| Taber Abrasion 1000gm/1000 cycles | 5% weight loss |
| 60$^0$ Gloss (ASTM D-1308): | >90 |
| Tensile Strength ASTM D-412 | 2500 lbs per sq/in |
| Elongation ASTM D-412 | 8% |

**Adhesion**:

| | |
|---|---|
| Dry Tape Test (ASTM D-3359) | 5A |
| Wet Tape (24 hr/700F) | 5A |
| Wet Tape (4 days/700F) | 5A |
| Weathering: | |
| QUV - "B Bulb" (1000 hr) | |
| (ASTM D-4587-91) | >92% gloss retention, |
| | 1.6 Delta E color change |

## CHEMICAL RESISTANCE

4 hour spot test

| | |
|---|---|
| 50% NaOH (Sodium Hydroxide) | No Effect |
| 10% Acetic Acid | No Effect |
| 30% NH3 (Ammonia) | No Effect |
| MEK | Becomes Tacky |
| Xylene | No Effect |
| Brake Fluid | Becomes Tacky |

## RESISTANCE PROPERTIES

(per ANSI/KCMA A161.1-1990)Test 9.3.2.

24 Hour Tests

| | |
|---|---|
| Vinegar | No Effect |
| Lemon Juice | No Effect |
| Orange Juice | No Effect |
| Grape Juice | No Effect |
| Tomato Catsup | No Effect |
| Coffee(115$^o$F) | No Effect |
| Olive Oil | No Effect |
| 100 Proof Alcohol | No Effect |
| One Hour Test: | |
| Mustard | No Effect |
| Hot and Cold Check Cycles | Passes 10 cycles |

## ADHESION CHARACTERISTICS

(1.0 mil dry films air dried seven days)

| | |
|---|---|
| Masonry/Concrete | Excellent |
| Stucco/Plaster | Excellent |
| Untreated Cold Rolled Steel | Excellent |
| Bonderite 100 | Excellent |
| Bonderite 1000 | Excellent |
| Tin Plate | Excellent |
| Untreated Aluminum | Excellent |
| Anodized Aluminum | Excellent |
| Polycarbonates | Excellent |
| High Density Polyethylene | Excellent |

## PHYSICAL PROPERTIES

| | |
|---|---|
| Solids content by weight | 72-74% |
| Solids content by volume | 72-74% |
| Maximum V.O.C. | <50 grams per liter |