



## **Immunacoat Antimicrobial Aliphatic Polyurethane Coating**

Immunacoat® Aliphatic Polyurethane is a two-component, high performance, zero-VOC, odorless, water-based, all organic paint/coating with anti-microbial additives that protect the coating from viruses, bacteria, mold/mildew, fungi, and algae. Immunacoat also provides years of excellent protection against harsh weather conditions, UV exposure, corrosion, physical damage, and has elastomeric properties. Immunacoat acts as a breathable elastomeric waterproofer and can be applied in low temperature conditions down to 40 °F.

Immunacoat also has Anti-Graffiti properties that allows the user to easily remove almost any type of graffiti on the surface with a simple cleaner and avoid heavy/harsh chemicals.

This product may be sprayed, brushed, or roller applied. Immunacoat is unique in that it has no VOC's due to its total water-based formulation. When fully cured, this product has good chemical acid resistance, UV protection, excellent water resistance, abrasion resistance, flexibility, and is totally environmentally safe.

Immunacoat Aliphatic Polyurethane is a two component product and is packaged in 1Qt and 1 Gallon kits. It is available with 2 gloss level options; matte, and high gloss clear finish and in a non-yellowing clear or in a pre-tinted white. It Has Iso-Free Technology So That When Part B Is Mixed With Part A, The crosslink reaction makes the combined product free of any isocyanates. Thereby the product is safe to apply for both the applicator and the environment with zero VOC's.

### **What comes in a kit?**

Part A    Part B    Kit Makes\*:

1 Quart   1 Pint   1 Quart    Coverage = 75-100sqft

1 Gallon   1 Quart   1 Gallon    Coverage = 300-400sqft

### **SPECIFICATIONS**

Solids by Weight

Clear 60% (+/-2%) Pigmented 66% (+/-2%)

Part A Part B Kit Makes\*:

|                            |   |
|----------------------------|---|
| Solids by Volume           | 50%   |
| VOC                        | 0 g/L (mixed)   |
| Colors                     | Clear and White   |
| Recommended Film Thickness | 3-4 mils wet, 1.5-2 mils dry (Do not apply over 5 mils wet) |
| Coverage per Gallon        | 250 – 400sq’/gal @3-4 mils wet thickness                    |
| Packaging                  | 32oz kit, 1 gallon kit                                      |
| Mix Ratio                  | 2.25:1 mix ratio by volume                                  |
| Shelf Life                 | 1 year in unopened container                                |
| Finish                     | High gloss (>85-90 at 60 degrees @glossmeter)               |
| Gloss Loss                 | <10% ASTM D523  |
| Color Loss                 | <1.1% ASTM D2244  |
| Humidity                   | 1500+ hours ASTM D2244                                      |
| Salt Spray                 | 1500+ hours ASTM B117                                       |
| Abrasion Resistance        | < 40 mg ASTM D4060  |
| MEK Double rub @50% solids | Passed 2,000 cycles   |
| Flexibility                | Pass ASTM 2794  |
| Adhesion                   | Pass ASTM D2197   |
| Odor                       | None  |
| Hardness                   | > 2H  |
| Impact Resistance          | 160lbs  |

### COVERAGE RATE

| Substrates           | Sq Ft/Gallon      |
|----------------------|-------------------|
| Textured Surfaces    | Approx. 250 – 300 |
| All Masonry Surfaces | Approx. 300       |
| Painted Surfaces     | Approx. 400       |
| Wood Surfaces        | Approx. 300       |
| Metal                | Approx. 400       |
| Tile                 | Approx. 350       |

### CURE SCHEDULE

|                          |               |
|--------------------------|---------------|
| Pot Life                 | 3/4 to 1 hour |
| Tack Free (dry to touch) | 4 hours       |
| Recoat                   | 4 – 8 hours   |
| Full Cure                | 3 – 7 days    |

## CHEMICAL RESISTANCE

**Immunacoat® provides excellent resistance to a wide range of chemicals and acids, including:**

Ammonium hydroxide

Potassium hydroxide

Sodium hydroxide

Sodium chloride

Trisodium phosphate

Ethyl Alcohol

Isopropyl alcohol

Methyl alcohol

Hyjet #3

Skydrol 500 A & B

Hydrochloric acid 10%

Phosphoric acid 35%

Sulfuric acid 20%

Acetic acid 24%

Trichlorethylene

Perchlorethylene

Toluene & Xylene

Jet fuel – Butyl cellusolve

Acetone – Cellusolve acetate

MEK (Methyl ethyl ketone)

Beer – cola – milk

Mustard – bleach

## MIXING AND APPLICATION INSTRUCTIONS

After mixing, the components may be reduced with water. Typical spray applications require a 5% to 10% reduction. Do not exceed 15%

**SURFACE PREPARATION:** Make sure all contamination such as dirt, oil, grease etc has been removed from surface that might impact adhesion.

## PRODUCT MIXING:

- Stir Part A for 2 minutes with Jiffy Mixer type drill mixer at slow speed (500 rpm) to fully disperse the product

- To Catalyze product (get it ready to use) pour Part B into Part A slowly and mix for 2-3 minutes
- Pour a portion of mixed Part A and B back into Part B can until full and mix well for 30 seconds, then pour back into the mixed Part A and B can.
- Allow product to stand for 5 minutes before applying. Loosely cover mixed product **DO NOT RESEAL MIXED PRODUCT!**
- Product may be reduced with clean water to achieve desired viscosity. We recommend using distilled water, but tap water works fine.
- Typical spray applications require a 5% to 10% reduction with water. Do NOT exceed 25%.
- Do NOT reduce catalyzed product after 30 minutes
- IMPORTANT: Mark time to establish pot life from when you start mixing A and B. Pot life is 3/4 to 1 hour.
- Do NOT mix with other products or other containers of Immunacoat.

Improper mixing may result in product failure. For best mixing results and proper blending of parts A and B, recommend a (Jiffy Mixer) style drill mixer.

**REDUCTION (OPTIONAL) REDUCTION // CLEAR** Pour the contents of Part B into Part A. After mixing the components well (as described below) for approximately two (2) minutes, it may be reduced with water up to twenty percent (20%). Typical spray applications require a 5% to 10% reduction. Do not exceed 20%. **REDUCTION // WHITE** Pour the contents of Part B into Part A. After mixing the components well (as described below) for approximately two (2) minutes, it may be reduced with water up to eight percent (8%). Typical spray applications require a 5% to 8% reduction. Do not exceed 8%

*\*See mixing instructions for dilution percentages* **PRODUCT APPLICATION: IMPORTANT:** Proper methods to protect from over spraying should be implemented. Atomized particles will adhere to most surfaces and are extremely difficult to remove. Temperature and humidity directly affect pot life and dry time. Conditions should be between 40 – 95 °F (5 – 35 °C) and humidity should not exceed 80%. Can apply using brush, roller or sprayer. **Smooth Surfaces** Immunacoat® may be applied directly over most surfaces without primer. Apply a light coat at a thickness of 3 to 4 wet mils. Do not exceed 5 mils. Reduction may create optimal flow. Dry mils thickness is 1.5-2. Ferrous metal surfaces require primer before application. When rolling product, recommend 1/4" nap lint free roller for smooth surfaces **Porous Surfaces** Most porous surfaces should have a sealer or filler to adequately eliminate potential pinholes prior to applying Immunacoat®.

- For unpainted porous surfaces, use sealer or filler prior to application of Immunacoat®
- Apply one coat of Immunacoat® (3-4 mils wet per coat) allowing 4 hours between coats or when coating is tack free (pressing thumb into surface and no thumbprint remains)
- Any runs should be brushed or rolled out immediately before drying
- When dry, thickness is 1.5 – 2 mils
- When rolling product, recommend 3/4" nap lint free roller cover for porous and textured surfaces

\*For heavy duty applications such as warehouse floors with heavy forklift traffic, total DFT thickness should be 3-4 mils (2 coats) **RECOAT OR TOPCOATING:** Multiple coats of this product are acceptable. When recoating this product, it is advisable to apply the recoat before 24 hours passes. If the first coat has dried longer than 24-hours, abrade the surface to promote adhesion for the second coat. **CLEANUP:** Clean up promptly with mild soap and water before product cures. Dispose of according to local, state and federal regulations.

**PRODUCT STORAGE:** The recommended storage temperature is approximately 22 °C (72 °F). Do not damage containers. Store in a dry place. Do not store for extended periods in direct sunlight. Protect containers from resin and moisture contamination.

## LIMITATIONS

- Immunacoat® should be tested on all substrates before complete application
- Do not apply in humidity above 80% or rain
- Horizontal surfaces coated with Immunacoat® become slippery when wet, we recommend an anti-slip additive like (i.e. Shark Grip) to maintain OSHA ADA standard coefficient of friction of 0.6(level) and 0.8(ramp).
- Should not be applied in high wind, rain or when the ambient temperature is below 5 °C (40 °F).
- Certain porous surfaces may require sealer or block filler to allow the Immunacoat® to create a more desirable application and maintain the integrity of the surface. Test patch should be applied before the final application
- Do NOT over apply. More is NOT better. A heavier application can cause micro blistering and affect the finish
- When using white color Immunacoat® over previously painted surface, test first to confirm it will provide the hide needed in a one or two coat application. Lighter colors will be easier to cover in one coat.
- Physical properties are typical values and not specifications.

## RECOMMENDED USES

- A. Protect high-contact surfaces from graffiti, viruses, bacteria, mold, mildew and fungus in bathrooms, public transportation, hospitals, restaurants and other high-contact public surfaces.
- B. Non-yellowing topcoat, UV-resistant applications.
- C. Direct-to-metal and concrete applications.
- D. Chemical and acid resistant applications.

## PERSONAL PROTECTION

1. **Product** is a zero-VOC coating. The volatile to evaporate will be water. No special clothing or respirators are required after mixing.
2. Due to its water-based formulation, the hazard of flammability is removed.
3. Take precautions when handling Part B prior to mixing. Mix in well-ventilated area and avoid skin contact.

## CLEAN UP

- Clean up brushes and trays with mild soap and water immediately after use and before product cures.

**DISPOSAL**

- Catalyzed product will harden overnight and once hardened can be disposed of as standard solid waste according to local, state, and federal regulations.

***Physical Properties***

|                             |   |    |
|-----------------------------|---|----|
| <b>Percent Solids (PBW)</b> | Clear/Matte<br>(±2%)/58%                      | 60 |
| <b>Dry Time</b>             | 4 – 8 hours                                   |    |
| <b>Cure Time</b>            | 3 – 7 days                                    |    |
| <b>Pounds Per Gallon</b>    | Part A 9.2lbs/gallon.<br>Part B 8.7lbs/gallon |    |

**MIXING INSTRUCTIONS**

1. To catalyze product, pour Part B into Part A and mix for 1 (one) minute.
2. Add water to fill line on Part B can for 20% reduction.
3. Pour water from Part B into Part A and mix for 2 (two) minutes.
4. **Important:** Mark time to establish pot life. Pot life is 1 (one) hour.
5. Product should not be mixed with other products or other containers of **the product**.
6. Do not reuse catalyzed product.

**Delivery:** Materials shall be delivered in the original sealed containers, clearly marked with manufacturers name and type of material.

Creator: Provecta Coatings LLC

Manufacturer: Schneider Manufacturing

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