

# IONYX OPTIMUM ADHESION INSTRUCTIONS/TECH SHEET

**Ionyx Optimum Adhesion** is a fast drying and ultra-thin adhesion promoter formulated using controlled chemical nanotechnology. Used as a tie coat, it bonds layers of material together making mechanical abrasion a thing of the past. Optimum Adhesion is equally effective used to coat plastics such as RV roofs, penetrating into surfaces to provide optimum protection from harmful environmental elements. Expected wear on plastics: 1 year.

## SURFACE

Painted or unpainted iron; aluminum, copper and other metals; hot rolled steel, cold rolled steel, stainless steel; powder coated and galvanized surfaces; wood, rubber, plastic, fiberglass and glass. Plastic surfaces, plastic furniture, stadium seats, vehicle interiors, vinyl awnings. **Does not work on smooth high density polyethylene or polypropylene.**

## SOLUTION

**On Plastics:** Reduces rate of oxidation, cracking and discoloring. Provides a more durable easier to clean surface. Protects from food and beverage stains and graffiti. Restores the color from UV damage, and then provides long-lasting protection from future UV damage. **As a Tie Coat:** Removes the need to sand between layers of paint and other materials.

## CHARACTERISTICS

Color: Clear to slight amber to rose (depending on temp and humidity). Always dries clear.  
Finish: Available in Gloss, Satin or Matte  
Vehicle Type: Solvent based  
Flash Point: (C Penskey Martens closed cup 16.7 C (62.1F)  
VOC: 20 g/l  
Weight per Gallon: 7.36 lb/gallon  
Non-Breathable

## COVERAGE

800-1200 sq. ft. per gallon. Coverage will vary depending on the porosity and texture of the substrate.

## SURFACE PREPARATION

Surface must be clean, dry and in sound condition. Remove all oil, dust, grease, dirt, and other foreign material. Rinse thoroughly with fresh water and allow surface to dry.

## APPLICATION

Due to the wide variety of substrates, always test Ionyx Optimum Adhesion in an inconspicuous location to ensure performance and compatibility/adhesion with the surface.

**Recommended: If applying to plastic that is going to be exposed to extreme wear and tear add 1 part Ionyx Quick Seal & Enhance to 5 parts Plastic Coat**

**to enable easy, fast touchups on vulnerable areas (without abrading the area first).**

Stir container well to re-suspend nanoparticles, as there will be settlement of nanoparticles in the bottom of the container; typically ¼". Re-stir contents at least every 10 to 15 minutes during the application process to re-suspend nanoparticles and ensure proper performance of the coating.

**PLASTICS:** Apply using a high volume, low pressure (HVLP) spray gun with a 1.0-1.3 size tip and the pressure set at approximately 25 to 30 psi. Achieve 8" to 10" elongated pattern approximately 1 ½" wide in the middle and fluid enough to cover but not puddle. Once spray pattern is established, spray one coat in a cross-pattern left to right, up and down to provide sufficient coverage and will prevent uncoated areas. Desired wet film thickness (WFT) is approximately 1.3 to 2.0 mils.

Blowing wind will affect the quality of the finish, may disrupt the spray pattern from the HVLP sprayer and can contribute to contamination of the finish. *Recommended: erect a windscreen to protect the area prior to beginning the coating application.*

**CAUTION:** If using spray application method in an enclosed space, tent off spray area using plastic tarps to prevent spray mist or overspray from adhering to unintended surfaces or objects. Use fans to supply positive fresh air and ventilate exhaust to outside enclosed or tented area. To avoid ignition or explosion of fumes or vapors, never conduct spray application near an open flame or possible source of ignition such as pilot light, or anything may create sparks. OSHA rules dictate an observer should monitor applicator for any signs of physical distress when applying coatings in enclosed areas.

**Drying Time @ 77 F, 50% Rh):** Temperature and humidity dependent.

Touch: 1 1/2 hours

Through: 2-4 hours

Full Cure: 7 Days

## CARE & MAINTENANCE

Hose off with a garden hose equipped with a pistol grip sprayer. On interior, wipe with damp towel or rinse with fresh water and dry. To reapply: clean surface, then use a green Scotch Brite pad to create a mechanical tooth, then reapply. If recommended high use application instruction was followed, you used 1 part to 5 parts Quick Seal & Enhance during application, so that touchups may be applied directly after cleaning surface, with no abrasion needed.

# IONYX OPTIMUM ADHESION INSTRUCTIONS/TECH SHEET

**Tie Coat:** Used as tie coat, Optimum Adhesion is a quick-dry adhesion promoter. The next layer of coating must be applied within 10 minutes.

Apply Optimum Adhesion in an ambient temperature between 7-40 degrees Celsius, 90% RH or less, with no chance of precipitation, including morning dew for 5 hours after completing the coating process.

**CAUTION:** If using spray application method in an enclosed space, tent off spray area using plastic tarps to prevent spray mist or overspray from adhering to unintended surfaces or objects. Use fans to supply positive fresh air and ventilate exhaust to outside enclosed or tented area. To avoid ignition or explosion of fumes or vapors, never conduct spray application near an open flame or possible source of ignition such as pilot light, or anything may create sparks. OSHA rules dictate an observer should monitor applicator for any signs of physical distress when applying coatings in enclosed areas.

Optimum Adhesion may be sprayed, rolled or brushed. Best results and greater coverage are achieved with spray application.

**Spray Application:** Use a portable alcohol and acetone-proof sprayer with a grey or red tip or and HVLP spray gun with a 1.0 size tip and the pressure set at approximately 25 psi. Achieve an elongated spray pattern 20-25 cm long and 5 cm wide in the middle with sufficient fluid to cover but not to puddle. Begin and end spraying into a bucket to avoid drips on the surface being coated. Apply one coat to the surface in a cross-hatch pattern to provide sufficient even coverage and avoid uncoated areas.

**Roller Application:** Use an ultra-smooth high-density foam roller and apply Optimum Adhesion as quickly as possible in a cross-hatch pattern, ensuring all areas are covered. Do not apply downward pressure on the roller.

**Brush Application:** Use a good-quality brush suitable for the area to be coated to apply Optimum Adhesion as quickly as possible in a cross-hatch pattern, ensuring all areas are covered. Avoid overworking the coating.

## **Drying Time@ 21 C, 50% RH:**

Touch dry – 1 minute

Dry through 10-15 minutes.

## **INTERRUPTION OF WORK**

Dry coated areas look similar in appearance to untreated areas; may be difficult to determine the difference if work is interrupted. *Recommended: plan for interruption of work by stopping at an obvious*

*marked point (tape, etc.) so work to avoid untreated areas. **Recommencing Work:** apply over dry edge of coating without sanding.*