

## PIONEER PRO GF 200

### PRODUCT DATA/ APPLICATION INSTRUCTION

**PIONEER PRO GF 200** is a two component polyamide epoxy compound which cures into a tough and hard film with excellent adhesion and good chemical, solvent and abrasion resistance.

### TYPICAL USES

**PIONEER PRO GF 200** is designed for use as a:

1. Topcoat for properly prepared and primed steel and metal structures and equipment.
2. Floor coating over concrete epoxy primer.
3. Finish coat over broadcast aggregate, slurry and trowelled epoxy systems.

### TECHNICAL DATA

TABLE 1. PHYSICAL DATA

<b>Finish</b>	Gloss, will chalk if exposed to sunlight
<b>Weathering</b>	Very good. On exposure to sunlight, it will chalk and light colors may yellow without detracting from overall durability.
<b>Color</b>	Standard, custom colors

*White and light colors may show yellowing on aging. Yellow, red and orange colors will fade faster than other colors due to the replacement of lead-based pigments with lead-free pigments in these colors*

<b>Components</b>	2
<b>Curing mechanism</b>	Solvent evaporation and Chemical Reaction between components
<b>Induction Time</b>	20-30 minutes. <i>(Epoxies are often cured by amine functional polyamides and typically, not particularly soluble in the epoxy side. Because of this poor solubility, it is often necessary to allow extra time after mixing for the reaction products to gain solubility characteristics more closely related to each</i>

*other. This extra time is called the "induction period" or "sweat-in time" and allows time for two resins to partially co-react).*

**Theoretical Coverage** 7-10 sq.m. per liter serves as topcoat for **PIONEER PRO GF 100 and/or Zinc-Rich Epoxy Primer**. Material losses during mixing and application will vary and must be considered when estimating requirements.

**Solids Content, % (mixed volume)** 70±1%

**Pot life @ 29°C** 4-6 hour, less at higher temperatures. *(Keep out of the sun before blending. Some discoloration and darkening will occur at temperatures greater than 200°F, this will not affect film integrity or coating performance).*

**Mixing Ratio (by volume)** 3 parts A to 1 part B

**Dry Time** **Initial Cure @ 29°C** 12 hours

**Full Cure** **Maximum Strength** 168 hours

**Shelf Life** A and B components in unopened containers is 36 months. Store at temperatures between 50°F and 100 °F (10°C to 38°C). Do not open containers until ready to use the material.

*Note : The figures quoted for pot life and drying/curing times are dependent on site conditions such as volume of material mixed, ambient and substrate temperatures, weather and ventilation.*

### APPLICATION PARAMETERS

#### **SURFACE PREPARATION:**

A. AGED UNCOATED CONCRETE  
Must be dry, clean and free from oils, fats or greases. Degrease or scrub with detergents if



necessary. The concrete must be free from any incompatible additives or curing agents. Acid etch or abrasive blast clean. Prime with **PIONEER PRO GF 100 and/or Zinc-Rich Epoxy Primer** and topcoat with **PIONEER PRO GF 300**.

#### B. PREVIOUSLY EPOXY-COATED CONCRETE

Remove loose dirt, dust and paint by sweeping or vacuum cleaning. Remove grease, oil, floor compound, wax and other contaminants. Caustic soda treatment must be used on areas covered with a build-up of grease and/or soap scum. Heavy contaminated areas may require further removal by mechanical methods. If the floor is very old and completely saturated with oil, no cleaning method will completely remove the oil. In this case, try a small areas and apply a sample of the system before cleaning the entire floor.

Very glossy or hard coatings should be lightly sanded to insure maximum adhesion.

Concrete floor areas which, require patching should be free of dirt, oil, grease and other chemical contaminants. A test patch is recommended for use over existing coatings.

Prime with **PIONEER PRO GF 100 and/or Zinc-Rich Epoxy Primer** and topcoat with **PIONEER PRO GF 300**.

#### C. STEEL

Remove all loose rust, dirt, moisture, grease or other contaminants from surface. Power-tool clean SSPC-SP3 or hand-tool clean SSPC-SP2. For more severe environments, dry abrasive blast SSPC-SP7. Water blasting is also acceptable.

Prime with **PIONEER PRO GF 100 and/or Zinc-Rich Epoxy Primer** and topcoat with **PIONEER PRO GF 300**.

#### Application Equipment:

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

**Conventional Spray-** Industrial equipment such as DeVilbiss, MBC or JGA, or Binks # 18 or 62 spray gun. A moisture and oil trap in the main air supply,

mechanical pot agitator, separate regulators for air and fluid pressure are recommended.

**Airless spray** – Standard equipment such as a 33:1 pump or larger with a 0.017-inch tip with pre-orifice or fine finish tip.

**Brush application** - Additional coats may be required to attain proper thickness.

#### Application Procedure:

1. Flush all equipment with thinner before use.
2. Stir each component separately, then mix Part B Hardener into Part A Resin and mix until uniform.
3. Apply a wet coat in even, parallel passes; overlap each pass 50% to avoid holidays, bare areas and pinholes. If required, cross spray at right angles to first pass.
4. Check dry film thickness using nondestructive dry film thickness gauge such as Mikrotest or Elcometer. If less than the specified thickness, apply additional material.
5. Touch up random pinholes, holidays and small damaged or bare areas by brush when film dry to touch. Larger areas should be resprayed.
6. Clean all tools or equipment used while coating is still in its uncured state. Use **Pioneer Epoxy Reducer** or lacquer thinner to clean tools and spills.

#### HEALTH & SAFETY PRECAUTIONS:

Read material safety data sheet before use. Safety precautions must be strictly followed during storage, handling and use.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper



ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. RCI makes no recommendation about types of safety measures that may need to be adopted because these depend on application and space, of which RCI is unaware and over which it has no control.

### **PACKAGING**

Gallon set,      Part A – 3.7 kg  
                         Part B – 0.9 kg

### **WARRANTY**

RCI warrants its products to be free from defects in material and workmanship. RCI's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at RCI's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to RCI in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify RCI of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

**RCI makes no other warranties concerning the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall RCI be liable for consequential or incidental damages.**

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