

# **Greatfloor 300**



Pioneer PRO Greatfloor 300 is a two-component, heavy duty, 100% solids epoxy floor coating for heavy duty protection of industrial floors.

# **Key Features**

- High gloss
- High durability
- Cures at ambient temperature and high humidity
- Easy to apply with nominated spray equipment both airless and conventional.
  Can also be applied by roller provided specified film thickness is achieved.
- · Very good adhesion on steel and concrete

# **Product Specifications / Typical Properties / Physical Characteristics**

Table 1:

Physical properties: UNCURED STATE\*

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Parameters	Results
Color	Clear
Components	2
Mixing Ratio (Part A:Part B)	2:1 by volume
Induction Time	10-15 mins
%Total Non-Volatile	98 +/- 1
Solid by Weight (mixed)	
% Total Non-Volatile	98 +/- 1
Solid by Volume (mixed)	
Density, g/mL	
Part A	1.20 - 1.40
Part B	1.00 - 1.02
Viscosity @29°C	
Part A	80 - 120 KU
Part B	55 - 70 KU
Potlife @29°C	1/2 to 1 hr
	(less at higher temperature)
Drying Time	
Initial Cure @29°C	3-6 hrs
Full Cure	168 hrs

# **Applications**

It is ideally recommended for coating new or old uncoated or previously coated industrial concrete floors exposed to:

- 1. Heavy foot and rubber tired vehicle traffic
- 2. Intermittent chemical spills, splashes and power washings



Table 2: Physical properties: CURED STATE\*

Parameters	Results
Gloss	>95 (glossy)
Opacity	>80
Adhesion, 7 days curing	4B - 5B
Hardness, 7 days curing	H min
Flexibility (Mandrel Test)	No crack at 180° bent
Theoretical Coverage	
@500 μ DFT	≈ 2 m2/L
@250 μ DFT	≈ 4 m2/L

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

# **Application Procedure**

#### 1. Surface Preparation

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.

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 ensure 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.

**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.

#### 2. Method

# **Spray Method:**

- Flush all equipment with thinner before use.
- Stir each component separately, then mix Part B (Hardener) into Part A (Resin) in 2:1 ratio (Part A:Part B). Mix until homogeneous. Stand for 10-15 mins before use.
- 3. Apply a wet coat in even, parallel passes. Overlap each pass 50% to avoid bare areas and pinholes. If required, cross spray at right angles to first pass.
- 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, and small damaged or bare areas by brush when film is dry to touch. Larger areas should be resprayed.
- 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.

#### **Roller Method:**

- Flush all equipment with thinner before use.
- Stir each component separately, then mix Part B (Hardener) into Part A (Resin) in 2:1 ratio (Part A:Part B). Mix until homogeneous. Stand for 10-15 mins.
- 3. Pour the mixture into the area to be painted. Spread the paint using a notched squeegee having 15 mils aperture. Level and further spread the paint using a lint-free roller. Do not overdue passage of the lint-free roller into one area because it will trap more bubbles. Forward and backward passage will be enough.
- Use a spike/porcupine roller to pop-up unwanted bubbles. Cover all areas applied with coatings.
- 5. Touch up random pinholes, and small damaged or bare areas by brush when film is dry to touch.

#### 3. Cleaning.

Clean all tools or equipment used while coating is still in its uncured state. Use lacquer thinner to clean tools and spills.

Application Equipment for Spray Method. 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 De Vilbiss, 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.

Application Tools for Roller Method. For better application appearance, consider to use the following tools: notched squeegee with 15 mils apperture, lint free roller, spiked/porcupine roller



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#### Packaging (available sizes)

Gallon set (4 sets per box)

#### **Storage**

Keep container tightly sealed. Store in an area with adequate ventilation. Avoid storage near extreme heat, open flames or strong oxidants.

#### **Shelf Life**

2 years based on manufacturing date

#### **Health and Safety Precautions**

Read 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. Use only in well-ventilated areas. Store in cool, dry place in tightly closed receptacles. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where the material is handled, stored and processed. Contaminated work clothing should not be allowed out of the working place. Avoid release to the environment.

Avoid storage near extreme heat, ignition sources or open flame. Keep container tightly sealed. Store in an area with adequate ventilation.

# KEEP OUT OF REACH OF CHILDREN.

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