



# TECHNICAL DATA SHEET

## PIONEERPRO

### CONCRETE EPOXY 10HV

#### PRODUCT DESCRIPTION

PIONEERPRO CONCRETE EPOXY 10HV is a thermosetting type of concrete adhesive specially designed to have the following advantages:

1. It cures on damp or dry conditions.
2. No sagging when applied on vertical or sloping surfaces, up to 1/8" thick films.
3. When cured, it exhibits tough, hard, durable and infusible bond between concrete and wood, metal, masonry or asbestos.

#### TYPICAL USES

As an Epoxy Adhesive:

1. Bonding old concrete to freshly poured concrete topping, thus eliminating "cold joints" between old and new concrete.
2. Replaces cement in bonding pre-cast, concrete structural units such as concrete decores under damp or dry conditions.
3. Bonding wood or metal to concrete surfaces such as anchoring machinery to a concrete floor.
4. Anchoring and grouting concrete or ceramic floor tiles over cement, wood or steel.

As an Epoxy Mortar:

1. Patching spalled and damaged areas in concrete structures.  
As a tack coat or primer before pouring fresh concrete topping when bringing low areas to proper grade.

#### TECHNICAL DATA

Table 1: Physical Properties: UNCURED STATE

Parameters		Results
Color:	Part A	Gray
	Part B	Beige
Consistency	Thixotropic paste	
Solid Content	100 %	
Mixing Ratio (A:B)	1:1 by volume	
Pot Life @ 25°C	1 ½ - 2 hours	
Curing Time (Initial)	6 – 8 hours	
Tack Free Time	4 – 6 hours	
Shelf Life	18 months	
Coverage	1 gallon-set will yield 6,600 cc depending on surface roughness and porosity.	

Table 2: Physical Properties: CURED STATE

Parameters	Results	Remarks
Tensile Strength	3,000 ± 500psi	ASTM 638
Flexural Strength	7,000 ± 500psi	ASTM D79
Compressive Strength	8,500 ± 500psi	ASTM D695
Hardness	80-90	Shore D
Shrinkage	negligible	

Note: Two independent testing laboratories, U.P. Industrial Research Center and Philippine Rock Laboratory, tested its binding and flexural strength properties, respectively; U.P. Industrial Research Center binding test indicated that at 10,150 ft. lbs. bending moment, cracks occurred on concrete outside epoxy bindings. (Specimen: **PIONEERPRO CONCRETE EPOXY 10HV** joint concrete beam).

Philippine Rock Laboratory tested for the suitability of **PIONEERPRO CONCRETE EPOXY 10HV** as a bonding agent in concrete structures using their testing methods, results showed that the flexural strength of **PIONEERPRO CONCRETE EPOXY 10HV** over concrete is superior, at 545 psi, concrete failed, ¼" away from the joint.

#### INSTRUCTION FOR USE

##### SURFACE PREPARATION:

Concrete surface must be free of dirt, paint, oil grease, loose materials and other contaminants. On oil surfaces, wash with soap and water or acid etching (10% muriatic acid or hydrochloric acid) is recommended.

##### MIXING:

Mix equal volumes of Part A and Part B. Blend well until uniform color is obtained. To avoid wastage, prepare only the amount consumable within one (1) hour.

##### METHOD:

After thorough blending of mixture has been done, apply the adhesive on both surfaces to be bonded by spatula, trowel or putty knife. In bonding old to new concrete, coat old concrete with **PIONEERPRO CONCRETE EPOXY 10HV** and pour fresh concrete immediately over epoxy tack coat. For an effective bond, applied epoxy should be very tacky before pouring the fresh concrete mixture, having minimal water content, such as, a slump of two (2) inches.



# TECHNICAL DATA SHEET

## **PIONEERPRO**

### **CONCRETE EPOXY 10HV**

#### **CLEANING:**

**PIONEERPRO CONCRETE EPOXY 10HV** can be removed in its uncured state through the use of kerosene, toluene and ketones.

#### **HEALTH PRECAUTIONS:**

Avoid prolonged or repeated skin contact. In case of skin contact, wash thoroughly with soap and water. If contact with eyes occurs, flush thoroughly with clean water and seek medical attention immediately.

#### **PACKAGING**

**PIONEERPRO CONCRETE EPOXY 10HV** is available in gallon and quart can sets.