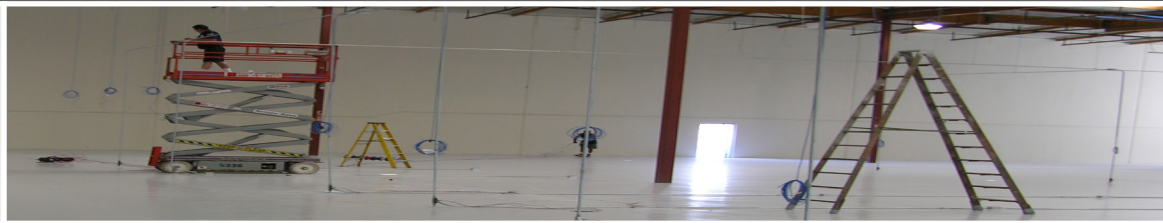




PETRA CVC

advanced coating systems



TWO COMPONENT DEEP PENETRATING PRIMER

GENERAL PRODUCT DESCRIPTION

Petra CVC (Concrete Vapor Control) is a two component, high performance water reducable polymer formulated to reduce water vapor transmission rates on concrete floors. Petra CVC will reduce water vapor transmission levels of up to 30 pounds /1000 square feet in 24 hours to manufacturer's acceptable levels. (3 pounds/ 1000 square feet/ 24 hours)The low viscosity polymer penetrates and bites into properly prepared concrete to form a bond that is stronger than concrete and alkali resistant. Petra CVC will not support biological growth (bacteria, fungus, mold or algae) and as such does not require the addition of anti-microbial agents or biocides. The material is generally applied as two or more thin coats providing a durable, breathable coating that reduces moisture vapor values to levels that are safe for the application of quality flooring.

Advantages:

- Essentially odorless
- Self-priming
- VOC Compliant (99 grams/ liter)
- Easy to apply, long pot life
- Will not soften or reemulsify in water
- Does not support biological growth
- Able to be applied over damp concrete
- Easy clean up with soap and water
- Alkali resistant to pH 14
- Can be applied over ten day old concrete

PRODUCT DATA

Volumetric Ratio:	4 to 1
Solids:	50% (+ or - 1%)
Coverage:	300-400 S/F per gal. Per Coat 150-200 S/F per gal. at 4-5 mils (2 coats)
Application Temperature:	55-90°F
Thinning:	See mixing instructions
Pot Life:	2 hours @ 75°F
Working time on floor:	15-30 minutes
Cure Time:	12-16 hours (walking) 24 hours (traffic)
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food and Beverage:	Meets requirements

FLOOR COMPATITIBILITY

Petra CVC is compatible with the following flooring materials:

- Wood
- VCT
- Vinyl Tile
- Vinyl Sheet
- Linoleum
- Ceramic Tile
- Carpet
- Rubber
- Sports
- Carpet Tile
- Polymer (Epoxy, Polyurea, Polyurethane, Acrylic)
- Most Flooring Mortar and Mastics

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Taber Abrasion	70-75 Mgs.	ASTM D 4060 CS 17 Wheels
Flammability	Self-extinguishing	ASTM D 635
Pencil Hardness	2 H	ASTM D 3363
Flash Point	>200°F	ASTM D 93

COLORS

Petra CVC is available in white only.

PETRA CVC

PATCHING

Apply CVC prior to patching voids, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with Petra Patch. After the patching material has cured, diamond grind patch the concrete. If a non-Petra patching material is used, make sure that it is a two-part epoxy patch. Always test unproven products by applying patch material first, then Petra coating system next. Check to see if bonding is firm.

MIXING

The mix ratio of Petra CVC is 4 A to 1 B. Due to the coatings extended pot life, several five-gallon kits may be mixed at a time for application. Mix the following with a drill and jiffy mixer.

1. Pre-mix the Part A until uniform. Part B does not require pre-mixing. If using the 5 gallon kit, pour all of the part B into the 6-gallon bucket of Part A.
2. Mix the combined material for two minutes.
3. Allow to chemically react for 20 minutes. Add one gallon of clean tap water to the mixed material and mix again for one minute. The material is now ready to apply. Petra CVC has a pot life of two

APPLICATION PROCESS

T Petra CVC is applied in two coats. For estimation, use 200 S/F (4 mils) to 150 S/F (5 mils) as a coverage rate. The following is for a two coat system:

4. Always apply in descending temperatures. Concrete is porous and traps air. Ascending temperatures (generally mornings), can cause out gassing in the concrete. It is safer to apply coatings in the late afternoon, especially for exterior applications.
5. Optimum ambient temperature should be between 65-90°F and at least 5° above the dew point during application.
6. In very hot and dry conditions, pre-wetting the concrete with a pump up sprayer will help with application. Apply only enough water to darken the concrete but not leave any standing water (damp dry).
7. Apply at approximately 300-400 S/F per gallon immediately by pouring out on to the concrete in a ribbon or small puddles.
8. Using a window squeegee on a pole, pull the CVC over the substrate. Pull the resin as thin as possible while still wetting out the concrete and uniformly covering the surface.
9. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards. Do not allow puddles in low spots, cracks and divots. Brush out excess material.
10. Lastly, backroll in the opposite direction from step 7. Keep a wet edge and as soon as the coating is uniform on the floor leave it alone and do not go back to touch up.
11. After the first coat is cured enough to walk on (6-24 hrs.), apply second coat by repeating steps 1-8. The coverage will be higher as the first coat primarily seals most of the concrete.

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:
Clean-- Contaminants removed
Profiled-- Surface etched
Sound

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be approximately 40-60 grit sandpaper after preparation.

PACKAGING

Petra CVC is available in one kit size:

	<u>Part A</u>	<u>Part B</u>
5 Gallon Kit	4 gal.	1 gal.

PRODUCT LIMITATIONS

Ground level concrete slabs emit moisture vapor. The allowable moisture emissions for concrete is 3 lbs. / 1000 S/F over a twenty-four hour period. If moisture is above this level, then blistering and delamination of coating may occur. A calcium chloride test should be performed to determine concrete moisture level. If moisture levels exceed the 3 lb. limit, a concrete moisture vapor control system should be used first before applying coating system. Please contact Petra technical department for approved systems.

CLEANUP

Petra CVC, while in an unreacted state, may be cleaned up with water and degreaser. Isopropyl alcohol, or acetone may be needed once the resin begins hardening.

WARRANTY

Petra Industrial Polymers products are warranted for one year after date of application. Please refer to the Petra Industrial Polymer's Limited Material Warranty for addition clarification.

SAFETY

Consult Petra CVC material safety data sheet. Avoid Petra CVC contact with skin. Protective gloves and clothing are recommended. This product contains flammable solvents. All electrical equipments should be grounded in accordance to the National Guard Code.



Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warranty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warranty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause.

Petra CVC 2of2