

# PERMA-SEAL™

## Clear Epoxy Sealer



### PRODUCT DESCRIPTION:

Perma-Seal™ is a clear two component solvent based epoxy coating that exhibits excellent characteristics for

abrasion resistance, chemical resistance, and substrate penetration. This product is suitable as a primer for high build coatings and urethanes and meets the new VOC requirements for New York, Pennsylvania, New Jersey and other states as an industrial maintenance coating.

### RECOMMENDED FOR:

Recommended for priming concrete. This product can withstand exposure to many common solvents and chemicals.

### SOLIDS BY WEIGHT:

Mixed = 63% (+/- 2%)

### SOLIDS BY VOLUME:

Mixed = 60% (+/- 2%)

### VOLATILE ORGANIC CONTENT:

Less than 336 g/l (mixed)

### STANDARD COLORS:

Clear - The clear product is not suitable over other colored coatings. Gardner color less than 7

### RECOMMENDED FILM THICKNESS:

5-6 mils per coat wet thickness (yields 3 mils dry)

### COVERAGE PER GALLON:

267 to 320 square feet @ 5-6 mils wet thickness

### PACKAGING INFORMATION

3 gallon and 15 gallon kits (volume approx)

3 gal kit= (2 gal part A @ 8.7#/gal and 1 gal part B @ 7.75#/gal

(weights and volumes approximate)

### MIX RATIO:

2 parts A to 1 part B by volume

### SHELF LIFE:

1 year in unopened containers

### FINISH CHARACTERISTICS:

Gloss (80 at 60 degrees @ glossmeter)

### ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 26.1 mg loss

### IMPACT RESISTANCE:

Gardner Impact, direct = 50 in. lb. (passed)

### FLEXIBILITY:

No cracks on a 1/8" mandrel

### ADHESION:

340 psi @ elcometer (concrete failure, no delamination)

### VISCOSITY:

Mixed = 1000-2000 cps (typical)

### DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

### CURE SCHEDULE: (70°F)

pot life – 2 gallons volume.....3-5 hours

tack free (dry to touch).....2-4 hours

recoat or topcoat.....3-6 hours

light foot traffic.....10-16 hours

full cure (heavy traffic).....2-7 days

### APPLICATION TEMPERATURE:

50-90 degrees F

### CHEMICAL RESISTANCE:

REAGENT	RATING
Acetic acid 5%	A
Xylene	B
Mek	A
Gasoline	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric	C
10% hydrochloric acid	C
20% nitric acid	A
Ethylene glycol	C

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

### PRIMER:

None required

### TOPCOAT:

Optional- Many products are suitable as topcoats including multiple coats of this product. For added chemical resistance, color stability, or UV stability, topcoat with a suitable aliphatic urethane.

### LIMITATIONS:

- Product clarity or gloss may be affected by high humidity, temperatures, chemical exposure, UV light exposure or exposure to lighting such as sodium vapor lights. Product is not UV light stable.
- For best results use a 3/8" nap roller.
- Slab on grade requires moisture barrier.
- Substrate temperature must be 5°F above dew point.
- All new concrete must be cured for at least 30 days.
- Product color will vary from batch to batch.
- Physical properties are typical values and not specifications.

# GARON

- Too thick of an application can cause product failure.

### MIXING AND APPLICATION INSTRUCTIONS

1) **PRODUCT STORAGE:** Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 60 and 90 degree F.

2) **SURFACE PREPARATION:** Surface preparation will vary according to the type of complete system to be applied. For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

3) **PRODUCT MIXING:** This product has a two to one mix ratio by volume - mix 2 gallons of part A to 1 gallon of Part B. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. If temperatures are below 60°F., let the material induct for five to ten minutes to help reduce the possibility of developing an epoxy blush.

4) **PRODUCT APPLICATION:** The mixed material can be applied by brush or roller. Maintain temperatures within the recommended ranges during the application and curing process. This product is intended as a base or primer coat over concrete prior to the application of other topcoat products. Too thick of an application may result in solvent entrapment and subsequent product failure.

5) **RECOAT OR TOPCOATING:** If you opt to recoat or topcoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process. The information on the front side are reliable guidelines to follow. However, it is best to test the coating before recoating or top coating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat or topcoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating or top coating can commence. Before recoating

or top coating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film, or deglossing). If a blush is present, it can be removed with any standard type detergent cleaner prior to top coating or recoating. Many epoxy overlays and coatings as well urethanes are compatible for use as a top coat for this product as well as multiple coats of this product.

6) **CLEANUP:** Use Xylol

7) **FLOOR CLEANING:** Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area,

utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

8) **RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.

#### **NOTICE TO BUYER:**

#### **DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY**

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. **NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT.** We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may **CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.**