# **NP210 TECHNICAL DATA (Slip Resistant Epoxy Coating)**

#### PRODUCT DESCRIPTION:

NP210 is a two component plus aggregate colored high solids epoxy coating that provides a chemical resistant non-slip surface that can stand up to heavy industrial traffic. This product is available in both a regular and super non-slip texture.

**RECOMMENDED FOR:** Recommended for coating of concrete, wood or steel for skidproofing ramps, stairs, loading docks, catwalks or other hazardous areas indoor or outdoors.

**SOLIDS BY WEIGHT:** 96% (+/- 2%) (liquids mixed without aggregate) **SOLIDS BY VOLUME** 88% (+/- 2%) (liquids mixed without aggregate)

**VOLATILE ORGANIC CONTENT:** Less than 111 g/l STANDARD COLORS: Light gray, medium gray,

and tile red

#### **RECOMMENDED FILM THICKNESS:**

14-18 mils per coat wet thickness

**COVERAGE PER GALLON:** 89-114 square feet depending on porosity and type of substrate. A standard 2.7 gallon kit will yield 240-308 square

PACKAGING INFORMATION: 2.7 gallon kit= 1 gallon part A (10.25#), 1 gallon part B (10.3#) and 20 pounds of a specially blended aggregate. MIX RATIO: The mix ratio is 1:1 by volume plus 20# mixed aggregate (volumes approximate) **SHELF LIFE:** 1 year in unopened containers COMPRESSIVE STRENGTH: 8,820 psi @ ASTM

TENSILE STRENGTH: 6,230 psi @ ASTM D638

ADHESION: 375 psi @ elcometer (concrete failure, no delamination) **ULTIMATE ELONGATION: 6.4% FINISH CHARACTERISTICS:** textured

**HARDNESS:** Pencil (3H)

**GARDNER VARIABLE IMPACTOR: 100 inch** 

pounds direct - passed

**ABRASION RESISTANCE:** Taber abraser CS-17 calibrase wheel with 1000 gram total load and

500 cycles= 41 mg loss (neat)

VISCOSITY: Mixed = 5000-7000 cps with

aggregate (typical) **DOT CLASSIFICATIONS:** 

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

Part C "not regulated"

**HEAT DEFLECTION TEMP:** 59 degrees C, ASTM

D648

**PRIMER:** Optional

**TOPCOAT:** None required. For improved chemical resistance or UV stability, NP321 or NP324 can be used as a topcoat.

| CURE SCHEDULE (70 Degrees F)              |             |
|---|-------------|
| Pot Life (1 1/2 Gallon)                   | 1-1.5 hours |
| Tack Free (Dry to Touch)                  | 4-7 hours   |
| Recoat or Topcoat                         | 5-8 hours   |
| Light Foot Traffic                        | 10-12 hours |
| Full Cure (Heavy Traffic)                 | 3-7 days    |
| Application Temperature: 60-90 degrees F. |             |
|   |             |

| CHEMICAL RESISTANCE  |   |
|----------------------|---|
| Xylene               | Α |
| methanol             | Α |
| ethyl alcohol        | Α |
| skydrol              | В |
| 10% sodium hydroxide | E |
| 50% sodium hydroxide | E |
| 10% sulfuric acid    | В |
| 70% sulfuric acid    | Α |
| 10% HC1 (aq)         | В |
| 5% acetic acid       | Α |

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.

#### LIMITATIONS:

Color stability may be affected by environmental conditions such as high humidity, low temperature, chemical exposure or exposure to lighting such as sodium vapor lights.

Colors may vary from batch to batch. Therefore, use only product from the same batch for an entire job. This product is not UV color stable. For improved UV stability, a suitable urethane can be used.

When applying material, roll the product in a consistent manner until the desired texture is obtained.

Data based on neat resin without aggregate.

Mixtures of chemicals and applications with exposures to chemicals at elevated temperatures should be thoroughly evaluated before applying.

Substrate temperature must be 5°F above dew point. All new concrete must be cured for at least 30 days prior to application.

See reverse side for application instructions.

Physical properties are typical values and not specifications. See reverse side for limitations of our liability and warranty.

## MIXING AND APPLICATION INSTRUCTIONS: NP210 Slip Resistant Epoxy Coating

**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 degrees F. Low temperatures or great temperature fluctuations may cause product crystallization.

**SURFACE PREPARATION:** The most suitable surface preparation would be a fine brush blast (shot blast) to remove all laitance and provide a suitable profile. All dirt, foreign contaminants, oil 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.

**PRODUCT MIXING:** This product has a mix ratio of 10.25# part A to 10.3# part B and 20# mixed aggregate. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. After the two liquid parts are combined, add in the provided aggregate and mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Improper mixing may result in product failure.

**PRIMING:** (optional) Any suitable primer can be used before applying this product, however, it is not required. See the front side of this technical data for primer information.

**PRODUCT APPLICATION:** The mixed material should be applied by a roller or brush at the recommended thickness. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. It is best to try and roll the product in the same direction for a more uniform appearance.

**RECOAT OR TOPCOATING:** Recoats or topcoats of this product are normally unnecessary. However, if you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to topcoating or recoating. A standard type detergent cleaner can be used to remove any blush. Many epoxy and urethane coatings are suitable for use as topcoats as well as multiple coats of this product.

**CLEANUP:** Use xylol.

**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.

**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.

COPYRIGHT 9/1/12 NATIONAL POLYMERS INC.