



# Specialty Flooring Products

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## TECHNICAL DATA: NOVOLAC EPOXY

### Novolac Epoxy

NC- Novolac Epoxy is a two component colored high solids novolac epoxy coating designed for application where splash and spills of acids, chemicals, and solvents occur.

### Recommended Uses

Recommended for a high build topcoat for traffic areas, chemical troughs, and curbs, as well as tanks and chemical spill areas for cement masonry or brick.

### General Product Data

**SOLIDS BY WEIGHT:**

96% (+/- 1%)

**SOLIDS BY VOLUME:**

94% (+/- 1%)

**VOLATILE ORGANIC CONTENT:**

0.40# per gallon (mixed)

**STANDARD COLORS:**

Light gray, medium gray, and tile red

**RECOMMENDED FILM THICKNESS / COVERAGE PER GALLON:**

16-18 mils / 90-100 sqft per gallon @ 16-18 mils

**HARDNESS:**

Shore D = 88

**PACKAGING INFORMATION**

3 gallon kit (volume approximate)

15 gallon kits (volume approximate)

**ADHESION:**

425 psi @ elcometer (concrete failure, no delamination)

**MIX RATIO:**

10.15 pounds (1 gallon) part A to 4.2 pounds (.50 gallons) part B (volumes approx.)

**SHELF LIFE:**

1 year in unopened containers

**FLEXURAL STRENGTH:**

9,610 psi @ ASTM D790- 1/2"X1/2" bars span 4"

**FINISH CHARACTERISTICS:**

Gloss (>40 at 60 degrees @ Erichsen glossmeter)

**COMPRESSIVE STRENGTH:**

9,900 psi @ ASTM D695

**TENSILE STRENGTH:**

6,680 psi @ ASTM D638

**ULTIMATE ELONGATION:**

4.7%

**IMPACT RESISTANCE:**

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

**ABRASION RESISTANCE:**

Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles= 20 mg loss

**HEAT DEFLECTION TEMPERATURE:**

115.5 degrees F, ASTM D648

**VISCOSITY:**

Mixed = 2200-2700 cps (typical)

**DOT CLASSIFICATIONS:**

Part A "not regulated"

Part B "CORROSIVE LIQUID N.O.S., 8, UN1760, PGIII"

**CURE SCHEDULE (70°):**

Pot life – 1 1/2gallon volume .....25-35 minutes

Tack free (dry to touch)..... 5-7 hours

Recoat or topcoat.....5-10 hours

Light foot traffic.....10-18 hours

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

**APPLICATION TEMPERATURE:**

60-95 degrees F with relative humidity below 90%

**CHEMICAL RESISTANCE:**

REAGENT	RATING
xylene	4
1,1,1 trichloroethane	3
MEK	3
methanol	3
ethyl alcohol	3
skydrol	3
10% sodium hydroxide	5
50% sodium hydroxide	5
10% sulfuric acid	5
70% sulfuric acid	3
10% HCl (aq)	4
5% acetic acid	4

Rating key: 1 - not recommended, 2 - 2 hour term splash spill, 3 - 8 hour term splash spill, 4 - 72 hour immersion, 5 - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

**PRIMER:**

Recommended NC-High Build Epoxy Primer

**TOPCOAT:**

None recommended

**LIMITATIONS:**

- \*Color stability or gloss may be affected by environmental conditions such as high humidity, low temperature or chemical exposure.
- \*Colors may vary from batch to batch. Therefore, use only product from the same batch for an entire job.
- \*Apply a suitable primer before using this product
- \*This product is not UV color stable and exposure to lighting such as sodium vapor lights may cause discolorations.
- \*Mixtures of chemicals and applications with exposures to chemicals at elevated temperatures should be thoroughly evaluated before applying coating. A test patch is recommended.
- \*Product can develop surface irregularities in leveling in combination to some chemical contamination or substrate compositions
- \*Substrate temperature must be 5°F above dew point.
- \*For best results, apply with a 1/4" nap roller.
- \*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 limitation of our liability and warranty.

# Novolac Epoxy

## Mixing and Application Instructions

**PRODUCT STORAGE:** Store product in an area 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 10.15# part A to 4.2# part B for standard colors. 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 parts are combined, 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:** A suitable primer should be used before applying this product. See the front side of this technical data for primer information. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.

**PRODUCT APPLICATION:** The mixed material material can be applied by brush or roller. However, the material can also be applied by a suitable serrated squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating.

**RECOAT OR TOPCOATING:** If you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. However, all previous coats should be deglossed to insure a trouble free bond prior to application of recoats or topcoats. 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. Multiple coats of this product are acceptable and can be used to achieve greater chemical resistance and build.

**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.

### Warranty

Since no control is exercised over product use, The Nikka Corporation warrants that its products are manufactured free from defect and are consistent and within manufacturing tolerances on our data sheets. No other oral or written representation or statement of any kind, expressed or implied, now or hereafter made is authorized or warranted by The Nikka Corporation. This product is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular use. The Nikka Corporation shall have no liability for incidental or consequential damage, direct or indirect. Our liability is limited to price of or replacement of our product at our option. By accepting delivery of our product means that you have accepted the terms of The Nikka Corporation Warranty.

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