

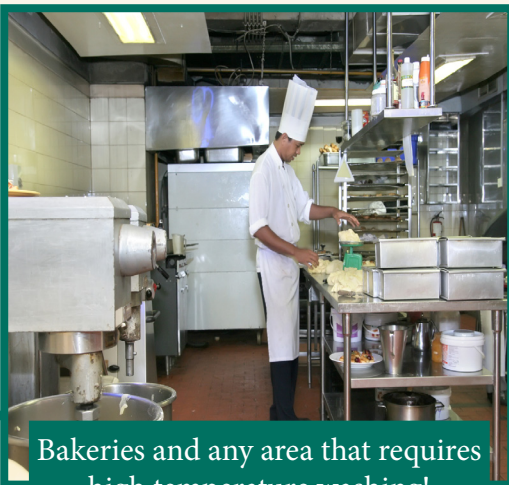
Water Based Epoxy Cement Overlay/ Broadcast (NP501)



Great for: Meat/dairy/fish
processing areas...



Pulp and Paper Processing...



Bakeries and any area that requires
high temperature washing!

Product Description:

NP501 is a three component trowelable epoxy/cement slurry that has outstanding performance in damp areas and higher heat exposure areas.

For use in areas where a durable shock resistant surface is needed. The product has good thermal shock capabilities and is a good choice for hot wash down areas.

Product Benefits:

- Withstands heavy and abusive service
- Flows and levels better than urethane version
- Cures down to 40 degrees F
- Moisture insensitive
- Withstands dry heat, up to 300 degrees F.

Typical Applications

- Food and Chemical Processing
- Bakeries
- Warehouses
- Cook/Chill Areas
- Sanitize/Wash Areas
- Pulp and Paper Processing
- Meat/dairy/fish processing
- Slaughter Houses

800.831.5600

www.nationalpolymers.com

NPI

National Polymers Inc.

Water Based Epoxy Cement Overlay/ Broadcast (NP501)

Physical Properties

Solids By Weight:

Approximately 92% solids
(liquids mixed with aggregate)

Volatile Organic Content:

negligible

Standard Colors:

gray and red

Recommended Film

Thickness:

1/8" to 3/16" (broadcasted systems can yield 3/16" to 3/8")

Coverage Per Kit:

(Standard Kit)

41 - 43 square feet @ 1/8"

27 - 28 square feet @ 3/16"

Packaging Information

EPOXY CEMENT: (6.30# part A in a gallon can not full + 8.35# part B in a gallon can + 33# blended aggregate)

Novolac Cement: (6.90# part A in a gallon can not full + 8.35# part B in a gallon can + 33# blended aggregate)

Mix Ratio:

EPOXY CEMENT: (6.30# part A + 8.35# part B + 33# aggregate)
NOVOLAC CEMENT: (6.90# part A + 8.35# part B + 33# aggregate)

Shelf Life:

1 year for liquids in unopened containers/3 months for aggregate unopened

Finish Characteristics:

Slightly textured/rough finish

Compressive Strength:

6,400 psi

Tensile Strength:

2,300 psi

Adhesion:

400 psi @ elcometer (concrete failure, no delamination)

Hardness:

Shore D = 82 typical

Impact Resistance:

Excellent

Abrasion Resistance:

Excellent

Viscosity (Epoxy Type)

Part A: 6,350cps; Part B: 250 cps (typical values)

When mixed with the part C aggregate, it forms a pourable slurry.

Heat Resistance:

Can withstand up to 300F degrees dry heat exposures
Application Temperature: 40-90 ° F with relative humidity below 90%.)

Primer:

None normally required unless outgassing problems develop.

Topcoat:

Intended to be broadcasted with a suitable aggregate or colored quartz aggregate onto the wet slurry.

THERMAL SHOCK RESISTANCE:

After a seven day cure, samples were held at 5°C for 15 hours and then immediately exposed to 100°C water. This cycle was repeated four times. The samples were then held at 5°C for 15 hours and then immediately exposed to steam for 5 minutes. After the thermal cycle and steam exposure, the surfaces were examined for cracks or damage and the bond strength was tested. The bond test before and after the thermal and steam exposure was greater than 400 psi and there was no damage to the exposed surface observed.

HOT OIL TESTING:

Hot cooking oil at 220°C was placed on a sample in a pool on the surface and allowed to cool to room temperature. No surface damage was apparent and adhesion of the sample was unaffected.

CHEMICAL RESISTANCE TESTING:

Spot testing per ASTM D1308 for Mustard, Ketchup, Lactic acid, vinegar, and lemon juice were performed and no physical damage to the exposed surface was observed. In 24 hour immersion testing, the following results were observed in hardness with no recovery period.

CHEMICAL EXPOSURE	SHORE D HARDNESS
Initial (no chemical exposure)	82
10% acetic acid	60
30% nitric	75
Sodium Hypochloride	80
60% perchloric acid	78

**For even increased chemical resistance, select the Novolac option.*

Cure Schedule (70 °F)

pot life - 150 gram mass	20-30 minutes
Tack free (dry to touch)	2-4 hours
Light Foot Traffic	6-8 hours
Full Cure (Heavy Traffic)	2-7 days



National Polymers Inc.