

PRODUCT DESCRIPTION:

EPOXAL 100TL is a solvent-free, two-component, thermosetting, high-build, 100% solids low viscosity epoxy coating. An ideal 2 component epoxy to be used as a sand mix trowel liquid with excellent trowelability and excellent workability properties.

PRODUCT FEATURES:

- 100% solids formulation means this is an odourless product formulated without solvents.
- Very low viscosity ensures excellent surface wetting and filling of air voids and capillary holes in concrete and masonry substrates.
- Excellent penetrating sealer for masonry substrates.
- Excellent wetting and air release properties.

TYPICAL USES:

- Used in conjunction with other NPC flooring systems(Kromoquartz & Kromotex) as a primer and mortar binder.
- Light to medium duty industrial floors, (i.e. warehouse or production areas subject to forklift traffic).
- Sanitary environments subjected to constant cleaning, (i.e. laboratories, clean rooms, food production areas, washrooms).
- Commercial and retail flooring.
- Can be used as a primer for Kromoquartz and Kromotex systems.

TECHNICAL DATA

POT LIFE:	25 minutes @ 21°C(70°F) (decreases at higher temperatures)
PACKAGING:	1 Gal, 4 Gal. & 20 Gal. Units.
SHELF LIFE:	1 year in unopened container @ minimum 20°C(68°F).
COLOUR:	Clear
SHEEN:	Gloss
MIXING RATIO:	3:1 Resin to Catalyst (by volume)
VOLUME SOLIDS:	100%
THEORETICAL COVERAGE:	1604 sqft/US Gal @ 1 mil DFT
RECOMMENDED DFT:	5 to 7 mils(primer)
CURE TIME @22°C(72°F):	Recoat-8-10 hrs Light Traffic- 15 hrs Full Cure-7 days
MIXED VISCOSITY @ 25°C(77°F):	480 ±20 CPS
CLEANUP:	NPC Epoxal Thinners

PERFORMANCE DATA

Typical Performance After 7 Days Cure @25°C(77°F)

COMPRESSIVE STRENGTH:	11,000 PSI(ASTM 695-85)
TENSILE STRENGTH:	3,145 PSI(ASTM 695-85)
TENSILE MODULUS:	180,000(ASTM D638-86)

TENSILE ELONGATION:	10.0 %(ASTM 658-86)
FLEXURAL STRENGTH:	4,140PSI (ASTM D790-86)
FLEXURAL MODULUS:	380,000(ASTM D790-86)
HARDNESS:	78(SHORE D)

NOTE: The above data is solely based on lab testing done under strictly controlled conditions. Ambient temperature was used for all testing. No warranty can be given as to the accuracy of this information as it will depend upon conditions at actual project locations, which are beyond our control.

SURFACE PREPARATION:

New Concrete Preparation:

All surfaces to be coated must be clean, dry and free of all contaminants. New concrete must be cured a minimum of 28 days with no more than 3% moisture content. Any curing or hardening compounds, form oils, release agents or laitance must be removed by means of mechanical abrasion. Shot blasting or diamond grinding are the recommended methods. These two means of mechanical abrasion will clean the surface and open the pores of the concrete to allow maximum penetration of the primer. Ensure the methods of mechanical abrasion are dust-free.

Existing Concrete Preparation:

Ensure all loose concrete is removed, using a scarifier, diamond grinder, bush hammer or other methods. Remove any contamination, including grease and oil using an industrial cleaner. (Consult your NPC representative for recommended cleaners) Prepare the entire floor by method of a shot blaster, or diamond grinder. Patch any uneven or damaged concrete using

“NPC Epoxal 100 Patch” or consult your NPC representative for further instructions.

Existing coated surfaces must be intact and tightly bonded to substrate below. If stability of existing coating is in question, test a small section and check for lifting. Hard or glossy surfaces must be abraded to improve adhesion performance. *NPC will not warrant the application of Epoxal coatings over an existing paint or urethane.*

Wood Preparation:

All wood surfaces to be coated must be clean, dry and free of all contaminants. The wood surface must be very rigid, with no possible movement. Fill any voids, or seams with NPC “Epoxal 100 Patch”

PRIMING:

EPOXAL 100TL is a suitable primer for most applications over concrete. If a lower viscosity primer is required to ensure maximum bond strength, we recommend Epoxal 100 Primer. If the concrete substrate has recently been subjected to moisture, we recommend Epoxal 100 DCP. *(Please consult your NPC representative for further details about Epoxal 100 DCP.)*

Apply all of the for mentioned primers at a spread rate of 5-7 mils. If the spread rate is less than 4 mils, the substrate may not be properly sealed. If the spread rate is greater than 6 mils it increases the probability of bubbles caused by out gassing.

MIXING:

EPOXAL 100 TL is always mixed at a ratio of 3 Parts A to 1 Part B by volume. When using EPOXAL 100TL as a primer, add the resin component first into a clean mixing pail, then add the catalyst component.

Always mix the two components for a full 3 minutes with a jiffy mixer.

When using EPOXAL 100TL as a trowel binder, mix the two components at the proper ratio in a clean mixing pail for **one minute**. After one minute, pour the mixed liquids into the mortar mixer and add the aggregate component. Mix for **one additional minute**. Pour onto the floor immediately.

APPLICATION:

Refer to the KROMOQUARTZ mixing and application instructions when using EPOXAL 100TL as a trowel binder.

Refer to EPOXAL 100WH application instructions when using EPOXAL 100TL as a primer.

For a proper bond the mortar layer must be applied within 24-48 hours after the completion of the prime coat, depending on temperature. If this window is surpassed, mechanical abrasion must be used to prepare the coating before any further coats. NPC recommends the prime coat be applied at 5-7 mils.

Do not wait more than 10 minutes between applying mixes of material to the floor.

Waiting longer between mixes may cause problems with working properties.

This will produce a smooth pinhole free surface. If there are any pinholes, an additional coat should be applied.

CURING:

At a temperature of 22^oC(72^oF), EPOXAL 100TL will be tack free within 8-10 hours. It will support light traffic at 24 hours and will reach full cure and chemical resistance in 7 days.

LIMITATIONS:

- This product must be applied to a substrate with a minimum temperature of 16^oC(61^oF).
- This product will amber if it is under prolonged ultra violet light.
- This product is not recommended for areas that are exposed to severe thermal shock.
- Working time and cure times are very dependant on temperature.

- Maintain a constant temperature before and during application period, and until coating is cured.