



IMPERIAL EPOXY 1040

WATER-BASED EPOXY PRIMER TECHNICAL DATA & APPLICATION INSTRUCTION

PRODUCT DESCRIPTION

Imperial Epoxy 1040 is a specially formulated, low odor, two component, water based epoxy primer. This product provides excellent substrate penetration and is a suitable primer for most epoxies, urethanes, polyureas & polyaspartic polyureas.

BENEFITS/FEATURES

- Superior bond
- Easy to use
- Low Odor
- Fast cure time
- VOC Compliant
- Works well as a stand alone, clear epoxy for interior applications
- Low Viscosity allows for excellent substrate wetting and penetration

RECOMMENDED APPLICATIONS

Imperial Epoxy 1040 is ideal for use in priming applications for most epoxies, urethanes, polyureas and polyaspartics.

TECHNICAL INFORMATION

Solids/Active Content (% by weight)	40%	Mix Ratio (a/b volume)	1 : 1
Pot Life	60 - 90 minutes	Coverage (raw concrete)	200 - 300 sq ft/gal
Dry Time - Tack Free	20 - 40 minutes	Coverage (existing coating)	250 - 350 sq ft/gal
Dry Time - Foot Traffic	6 - 12 hours	Application Temperature	50 - 80°F
Dry Time - Heavy Traffic	2 - 5 days	VOC	< 20 g / l
Dry Time - Recoat	4 - 6 hours		

***Above Information is based on lab temperatures of 70° to 72° at 50% relative humidity. Using this product outside of these parameters will affect the accuracy of the information above. Always Test prior to use!*

SPECIFICATIONS

- Dried Coating is USDA accepted
- Meets OTC, CARB, LADCO & SCAQMD VOC restrictions

COVERAGE RATES

- **Direct to Concrete** 200 - 300 sq ft / gal
- **Over an Existing Coating** 250 - 350 sq ft / gal

SHELF LIFE & PACKAGING

Imperial Epoxy 1040 has a shelf life of at least one year in it's original, sealed, unopened container. **Imperial Epoxy 1040** is packaged in 2 gallon and 10 gallon kits.

PRODUCT STORAGE

Store product in an area so as to bring the material to room temperature within the recommended application temperature range before applying. Long term storage should be between 60 and 90 degrees F. Keep from freezing.

CLEAN-UP & PRODUCT REMOVAL

Use PM Solvent. Dispose of containers in accordance with local and federal regulations. Dried, cured coating may be removed with a commercial stripper like Kingdom Products Nock-Off or by using a diamond grinding method, sandblasting method or similar mechanical action.

MOISTURE TESTING: Concrete floors, especially those not poured over a proper vapor barrier, are subject to possible moisture vapor transmission which may result in bubbling and/or failure of high performance coatings. Basic moisture testing can be performed by placing a 4' x 4' sheet of plastic on the concrete surface and securely taping it down on all edges. If after 24 hours the concrete is still dry below the plastic, the surface should be ready to coat. If any moisture is present, perform a calcium chloride and relative humidity probe to determine if excessive levels of vapor emissions are present before applying any coatings.

SURFACE PREPARATION/RECOATING: Concrete must be cured 28 days and it must be deemed structurally sound and completely clean and dry. It is recommended to prepare the concrete surface by mechanical means such as shot blasting or diamond grinding with 30 grit or coarser diamonds to achieve a CSP-2 to CSP-3 profile. (If using a thin mil system like Acid Stain or Flash Dye, an 80 grit diamond may be acceptable, to minimize visual scratches in the finish.) Vacuum concrete surface several times until dust thoroughly removed. If recoating or applying over an existing, fully bonded coating that is outside its recommended recoat window, the surface should be sanded thoroughly with a 60 - 120 grit sanding screen or coarser, until the surface is completely dulled with scratches. Vacuum dust thoroughly, rinse clean and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with pure Acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! Take all safety precautions.

If mechanical means or preparation are not suitable, it is recommended, using the proper protection, to prepare the surface with 4 parts water to 1 part muriatic acid. This preparation method is only suitable for an unsealed surface. Apply acid solution evenly on the surface with brushes, mops, brooms and keep wet for 10 - 15 minutes. Remove excess acid solution with a wet/dry vac and rinse surface thoroughly with clean water. On the final rinse, apply a neutralizing solution of ammonia or baking soda or TSP and water. Allow the floor to dry thoroughly, 24 - 72 hours prior to applying product.

Substrate, air and material temperature must be between 50°F and 80°F. If applied outside of these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing. Higher temperatures and excessive humidity will speed the cure rate of the product and cooler temperatures and lower humidity will slow it down.

TINTING: Tint using EpoPack-WB (32 oz pigment per 2 gallons of prepared Epoxy 1040). Add the pigment to Part A and drill mix for 2 - 3 minutes, prior to adding to Part B.

MIXING: Mix Part A and Part B separately with the a stir stick, low speed mixer or vigorously shake container prior to blending, to ensure uniform distribution of all ingredients. This is especially important when mixing less than a full kit. In a clean container, blend 1 Part A and 1 Part B using a drill mixer for 2 - 3 minutes. Avoid creating a vortex which could introduce air and/or moisture content into the mixture. Do not mix more material than can be applied within the usable pot life time frame. DO NOT THIN! Discard all mixed material that has not been used within this time frame.

APPLICATION: 18" rollers are recommended for any surface to speed application and reduce roller marks. Using a brush and/or 3/8" nap, shedless roller, dip and roll the mixed material from a roller pan. Start by placing the wet roller at one corner of a 4' x 4' square and roll the material at an angle from the top left of the square to the bottom right, applying no pressure to the roller. Spread that material across that square only and back-roll immediately to even out any roller marks. Adjust the size of your square as needed. After finishing that square, move on repeating the same technique. While applying, keep a wet edge to prevent roller marks. It is recommended to work in sections usually using control joints as dividers. Apply to mixed material within the usable pot life time frame. If the material becomes thick while applying and sticking to the roller, stop applying and discard the mixed material. At this point it has reached the end of the usable pot life. Do not allow to Puddle! Use a brush to remove excess coating in the joints. An airless HVLP sprayer may also be used.

PRECAUTIONS AND LIMITATIONS

- This product will freeze during storage. Store at temperatures above 40°.
- This product is not UV Stable and should not be used outdoors or in areas exposed to excessive sunlight.
- All new concrete must be cured for at least 28 days prior to application.
- **Imperial Epoxy 1040** may darken the surface of many new and existing concrete substrates. Test prior to use.
- This product may be slippery when wet. Anti Skid additives may be needed to reduce surface slip hazards.
- It is not recommended to apply product over any type of floor adhesive.
- It is not recommended to thin this product. Improper thinning may result in delamination and other performance issues.
- **Imperial Epoxy 1040** should be applied in one or two thin coats. Do not allow to puddle.
- Coverage rates vary depending upon many conditions including application method, surface porosity, applicator, etc.
- Physical properties listed on this technical data sheet are typical values not specifications.

SPECIAL NOTES

Always read Safety Data Sheet (SDS) and Technical Data Sheet (TDS) and Warranty Information in full, prior to use.