



# 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 adhesion
- Can be used as a wear surface
- Excellent substrate wetting and penetration
- Low Odor
- Easy to use
- Fast cure system with reduced recoat times

### RECOMMENDED APPLICATIONS

**Imperial Epoxy 1040** is recommended for priming properly prepared concrete or masonry surfaces in commercial, retail and high traffic areas. Excellent for Concrete Countertops, wall & floor coatings, institutional coatings and heavy duty maintenance coatings.

### TECHNICAL INFORMATION

Abrasion Resistance.....54 - 65 mg loss (Tabler Index, ASTM 4060-81, CS-17 Abrasion Wheel, 1000 gram load) Gloss 60.....86	Mix Ratio (a/b volume).....1 to 1 **9.07# part A (1.0 gal approx) to 8.54# part B (1 gal approx.)
Flexibility (1/8" Man.....Pass	Coverage (2-3 mils dft.).....200-300 sq ft/gal
Pencil Hardness (7 days).....F	Viscosity.....200 - 350 cps
Water Resistance.....Excellent	Pot Life.....45 min to 1 hour
Solids % Weight (Federal Spec. TTP-141B).....40%	Dry Time-Set to Touch (50% R.H. @ 72°F).....20 - 40 minutes
Density lbs/Ga. (Federal Spec. TTP-141B).....8.54	Dry Time-Recoat (50% R.H. @ 72°F).....4-6 hours
VOC .....< 20 grams per liter	Dry Time-Light Traffic (50% R.H. @ 72°F).....6 -12 hours
	Dry Time-Full Cure (heavy traffic) (50% R.H. @ 72°F).....2 - 5days

### CHEMICAL RESISTANCE

#### Chemical spot resistance 1 hour and 18 hour exposure

	<u>1 h</u>	<u>18 h</u>
Toluene	+	+
Ethanol	+	+
Sulfuric Acid (10%)	+	+
Acetic Acid (3%)	+	+
Acetic Acid (10%)	H/B	B

+ = no change; H = haze; B = blisters

#### Food stain resistance 18 hour exposure

	<u>18 h</u>
Coffee	no change
Ketchup	no change
Mustard	no change
Red Wine	slight stain

### 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.

### SHELF LIFE

**Imperial Epoxy 1040** has a shelf life of at least one year in it's original, sealed, unopened container.

### PACKAGING

**Imperial Epoxy 1040** is packaged in 1/2 gallon, 2 gallon and 10 gallon kits.

**SURFACE PREPARATION:** For a thin film build system (3-10 mils) we suggest either mechanical scarification, acid etching (and then neutralize to 7 PH), or diamond grinding until an appropriate profile is accomplished. For a high build system (over 10 mils), we suggest a fine brush blast (shot blast). To ensure adequate adhesion, the substrate must be free of all dirt, oil, dust, laitance and foreign contaminants. Prior to application a test should be made to determine that the concrete has an acceptable vapor barrier. This can be done by placing a 4' X 4' plastic sheet on the substrate and completely taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate does not show signs of eventual hydrostatic pressure problems that may later cause loss of adhesion.

**PRODUCT 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.** Add Part A to Part B and mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and homogenous. Water Based, two-part systems need to be mixed well for adequate cure and a streak free finish. Only mix enough product that can be applied within 20 minutes. Discard all material that has not been used within this time frame.

**PRODUCT APPLICATION:** Apply the mixed material by brush or roller with a 1/4" - 3/8" nap shed less roller cover within the usable pot life time frame, as well as the recommended temperature and relative humidity guidelines listed in the Technical Information section. If continuous out gassing in the concrete is causing bubbles, re-roll the material using a cross rolling method before the material cures to reduce or eliminate air entrapment. 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. While applying keep a wet edge to prevent roller marks. It is recommended to work in sections usually using control joints as dividers to ensure proper application results. Do not allow to Puddle!

**If recoating after 12 hours a light sanding using a fine sanding screen may be needed to ensure adequate inner coat adhesion.**

**PLEASE NOTE:** Applying Epoxy 1040 outside of the suggested parameters may result in job failure. It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates vary for all coatings and substrates depending on porosity, density, texture etc.

## CLEAN-UP & PRODUCT REMOVAL

Use PM Solvent. Dispose of containers in accordance with local and federal regulations. Dried, cured urethane may be removed with a commercial stripper, but recommended removal is by way of mechanical means, including sanding, shot blasting, etc.

## PRECAUTIONS AND LIMITATIONS

- All new concrete must be cured for at least 28 days prior to application.
- Coverage rates depend upon many conditions including application method, surface porosity, applicator, etc.
- **Imperial Epoxy 1040** should be applied in thin coats. Do not puddle.
- Be aware that this product may be slippery when wet. Anti Slip additives may be needed to reduce surface slip hazards.
- **Imperial Epoxy 1040** may darken the surface of many new and existing concrete substrates. Test prior to use.
- Product will yellow in the presence of UV light or other forms of light such as sodium vapor lighting.
- Physical properties listed on this technical data sheet are typical values not specifications.

\*\*If applying over an existing coating, proper adhesion and compatibility tests are essential. In this application the substrate preparation, application, performance and all other liabilities are strictly the end users responsibility. Kingdom Products offers no guarantee, warranty or other claims to the success or results of the job in this circumstance.

## SPECIAL NOTES

Please read Safety Data Sheet (SDS) and Technical Data Sheet in full, prior to use.