



## IMPERIAL EPOXY 1055

### WATER BASED EPOXY

### TECHNICAL DATA & APPLICATION INSTRUCTION

#### PRODUCT DESCRIPTION

**Imperial Epoxy 1055** is a specially formulated, low odor, two component, epoxy sealer that rivals solvent based products. This product provides fast cure times, superior chemical resistance, abrasion resistance, substrate penetration and hot tire pick up resistance.

#### BENEFITS/FEATURES

Yields excellent resistance to many common solvents and chemicals - Provides high gloss, abrasion resistant finish  
Excellent Hot Tire Resistance - Low Odor

#### RECOMMENDED APPLICATIONS

**Imperial Epoxy 1055** is recommended for priming or coating properly prepared concrete or masonry surfaces in commercial, retail, and high traffic areas. Excellent for wall and floor coatings, institutional coatings and heavy duty maintenance coatings.

#### TECHNICAL INFORMATION

Abrasion Resistance.....45-55 mg loss <small>(Tabler Index, ASTM 4060-81, CS-17 Abrasion Wheel, 1000 gram load)</small>	Mix Ratio (a/b volume).....2 to 1 <small>** 9.1# part A (1.0 gallon approximate) to 4.36# part B (.50 gallons approximate)</small>
Gloss 60'.....90	Coverage (3-4 mils dft.).....200-300 sq. ft./ga
Flexibility (1/8" Mandrel).....Pass	Viscosity.....300 - 500 cps
Pencil Hardness (7 days).....F	Pot Life.....1 - 1.5 hours
Water Resistance.....Excellent	Dry Time-Set to Touch (50% R.H. @ 72° F).....20 - 40 minutes
Solids % Weight (Federal Spec. TTP-141B).....55%	Dry Time-Recoat (50% R.H. @ 72° F).....4-6 hours
Density lbs/Ga. (Federal Spec. TTP-141B).....8.96	Dry Time-Light Traffic (50% R.H. @ 72° F).....6 - 12 hours
VOC .....< 20 grams per liter	Dry Time-Full Cure (heavy traffic) (50% R.H. @ 72° F).....2 - 5days
	Application temperature.....55-90 degrees F with relative humidity below 75%

#### 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 1055** has a shelf life of at least one year in it's original, sealed, unopened container.

#### PACKAGING

**Imperial Epoxy 1055** is packaged in 1.5 gallon, 3 gallon and 15 gallon kits.

## INSTRUCTIONS FOR USE

**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. However, **Imperial Epoxy 1055** can be applied to a damp floor as long as there are no standing puddles and the dampness is not from a continuous source of moisture due to lack of a vapor barrier. Adhesion tests are recommended prior to using.

**PRODUCT MIXING:** Pour a full pre-packaged kit of 2 parts of Part A to 1 part of Part B together 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.

**PRODUCT APPLICATION:** Apply the mixed material by brush or roller with a 1/4" nap - 3/8" nap shedless 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 24 hours a light sanding using a fine sanding screen may be needed to ensure adequate inner coat adhesion.

**PLEASE NOTE:** Applying **Imperial Epoxy 1055** 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 may vary for all coatings and substrates depending on porosity, density, texture etc.

## CLEAN-UP

Use PM Solvent. Dispose of containers in accordance with local and federal regulations.

## PRODUCT REMOVAL

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, ect.

**Imperial Epoxy 1055** should be applied in medium to 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 1055** 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 guaranty, warranty or other claims to the success or results of the job in this circumstance.

## SPECIAL NOTES

Please consult Material Safety Data Sheet (MSDS) and read Warranty information prior to use.

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