



## 6100 URETHANE WB

### 56% SOLIDS, MATTE FINISH, WATER-BASED URETHANE TECHNICAL DATA & APPLICATION INSTRUCTION

#### PRODUCT DESCRIPTION

**Kingdom Products' 6100 Urethane WB** is a high solids, matte finish, two-component, water based aliphatic polyurethane. This high performance material has excellent hardness and abrasion, hot tire & chemical resistance. **6100 Urethane WB** is low VOC and low odor with multiple uses.

#### BENEFITS

- Low Viscosity
- Excellent abrasion and wear
- VOC Complaint
- Low Odor
- Hot tire resistance
- USDA accepted
- Matte Finish
- Chemical resistance
- Commercial/Retail

#### RECOMMENDED APPLICATIONS

**6100 Urethane WB** is effective on many interior applications where a low odor, matte finish, abrasion resistant coating is required. Excellent for use as an institutional coating, heavy duty maintenance coating in commercial, retail and high traffic areas.

#### TECHNICAL INFORMATION

Abrasion Resistance.....38 - 40 mg loss (Tabler Index, ASTM 4060-81, CS-17 Abrasion Wheel, 1000 gram load) Gloss .....	Matte Finish	Mix Ratio (a/b volume).....2 to 1
Flexibility (1/8" Mandrel).....Pass		Coverage (3-4 mils).....200 - 300 sq ft/gal
Pendulum Hardness, sec.(ASTM D-4336).....175		Pot Life (50% R.H. @ 72° F).....30-45 min
Water Resistance.....Excellent		Dry Time-Set to Touch (50% R.H. @ 72° F).....5 - 6 hours
Solids % Weight (Federal Spec. TTP-141B).....56%		Dry Time-Recoat (50% R.H. @ 72° F).....12 hours
Density lbs/gal (Federal Spec. TTP-141B).....9.06		Dry Time-Light Traffic (50% R.H. @ 72° F).....18 hours
VOC .....< 100 grams per liter		Dry Time-Full Cure (heavy traffic) (50% R.H. @ 72° F).....7 days
		Application temp......50-80°F w/relative humidity <75%

#### CHEMICAL RESISTANCE

Urine.....No Effect	10% Sodium Hydroxide.....No Effect
Blood.....No Effect	50% Sodium Hydroxide.....No Effect
Brake Fluid.....No Effect	25% Sulfuric Acid.....No Effect
Xylene.....No Effect	25% Acedic Acid.....No Effect
Gasoline.....No Effect	20% Nitric Acid.....No Effect
Skydrol B-4.....No Effect	10% Hydrochloric Acid.....No Effect
Ethylene Glycol..... No Effect	MEK..... Film Softened

\*\* A chemical exposure test should always be performed prior to application to ensure satisfactory resistance.

#### STORAGE & SHELF LIFE

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°F and 90°F. Keep from freezing. **6100 Urethane WB** has a shelf life of at least one year in it's original, sealed, unopened container.

#### PACKAGING

**6100 Urethane WB** is packaged in 3 gallon and 15 gallon kits.

**SURFACE PREPARATION:** Mechanical scarification, acid-etching & neutralizing, or diamond grinding is recommended. To ensure adequate adhesion, the substrate must be primed with an epoxy primer such as our **Epoxy 1040**, be free of all dirt, oil, dust and foreign contaminants and applied within the recommended recoat time of the primer used. Prior to application of the primer 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 hydrostatic pressure problems that may later cause loss of adhesion. Adhesion tests are recommended prior to using.

**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.

**APPLICATION:** Apply the mixed material by brush or roller to a primed surface with a 3/8" nap - 3/4" nap lint free roller cover at a rate of 4 to 6 wet mils within the usable pot life time frame, as well as the recommended temperature and relative humidity guidelines listed in the Technical Information section. If there is continuous outgassing 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! Remove any excess material in joints or low lying areas. Puddled areas may not cure adequately and may cause blush or a white haze. If recoating after 24 to 36 hours (temperature depending) a light sanding using a fine sanding screen may be needed to ensure adequate inner coat adhesion.

**NOTE:** Applying **6100 Urethane WB** outside of the suggested parameters may result in job failure. It is always recommended to test the product in an 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. 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 under these circumstances.

## CLEAN-UP & PRODUCT REMOVAL

Use MEK or Acetone. 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.
- This product will freeze during storage if not stored at temperatures above 40°F.
- All HVAC ventilation ducts should be somehow blocked prior to application so solvent fumes are not distributed.
- If using indoors, use proper ventilation while applying and for hours after application to ensure fumes are removed.
- It is not recommended to apply this product over carpet, tile or other types of floor adhesives.
- Coverage rates depend upon many conditions including application method, surface porosity, applicator, etc.
- Improper thinning may cause sealer to delaminate in a short time frame. Thinning is NOT recommended.
- **6100 Urethane WB** should be applied in thin coats. Do not allow to puddle.
- Be aware that this product may be slippery when wet & anti-slip additives may be needed to reduce slip hazards.
- **6100 Urethane WB** may darken the surface of many new and existing concrete substrates. Test prior to use.
- Physical properties listed on this technical data sheet are typical values not specifications.

## SPECIAL NOTES

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