



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
- Low Odor
- Matte Finish
- Chemical & Solvent Resistance
- VOC Complaint
- USDA accepted
- Hot tire Resistance
- Excellent Abrasion Resistance

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

Solids/Active Content (% by Weight).....	.56%	Pot Life.....	45 min
Dry Time - Tack Free.....	.16 - 18 hours	Dry Time - Foot Traffic.....	20 - 24 hours
Dry Time - Recoat.....	.16 - 24 hours	Dry Time - Heavy Traffic.....	.4 - 7 days
Mix Ratio (a/b volume).....	2 to 1	Application Temp.....	.50 - 80°F
VOC	< 100 grams per liter	Appearance - Dry.....	.Clear & Matte Finish

***Based on lab temperatures of 70°F - 72°F at 50% RH.*

SPECIFICATIONS & COMPLIANCES

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

COVERAGE RATES

	First Coat	Second Coat (previously coated)
Unsealed Concrete	200 - 300 sq ft/gal	250 - 350 sq ft/gal

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. Smaller kits available upon request.

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.

MOISTURE TESTING: Concrete floors, especially those not poured over a proper vapor barrier (plastic), 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 moisture is present, calcium chloride and relative humidity probe testing should be done to determine if excessive levels of vapor emissions are present before applying any coatings.

SURFACE PREPARATION: The concrete surface must be fully cured, structurally sound, thoroughly clean of debris and completely dry. It is recommended to prepare the concrete surface by mechanical means such as shot blasting or diamond grinding with 30 grit diamond to achieve a CSP-2 to CSP-3 profile. If using with a thin film system, an 80 grit diamond may be acceptable to minimize visual scratches in the finish. Vacuum concrete surface until dust is thoroughly removed. If mechanical preparation is not suitable, and the surface is bare, unsealed concrete then it is recommended to prepare the surface with 4 parts water to 1 part muriatic acid. Apply evenly on the surface and keep it wet for 10 - 15 minutes. Remove excess acid solution with a wet/dry vacuum or floor scrubber. Rinse surface thoroughly with clean water and Kingdom Products' pH Neutralizer to restore the surface pH. Inspect the floor to ensure the surface has reached an even and adequate surface profile. Repeat the acid etch and neutralizing steps as necessary to achieve correct profile. Allow the floor to dry thoroughly for 24 - 72 hours prior to applying this product. ALWAYS use proper protective equipment when working with muriatic acid. Substrate, air and material temperatures must be between 50°F and 80°F. *If applied outside these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing. Higher substrate, air and material temperatures as well as excessive humidity will speed the cure rate of this product. Cooler temperatures and lower humidity will slow the cure rate of this product. If 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 until the surface is completely scuffed to a haze. Vacuum dust thoroughly, rinse with clean water 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 acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! Follow all safety precautions when using Acetone.*

TINTING: Use as a clear coat only. Tinting is not recommended. Color float and/or inconsistent color profile may leave an undesirable finish.

MIXING: If mixing less than a full kit, first mix Part A and Part B separately with a stir stick, low speed mixer or vigorously shake containers prior to measuring out the smaller kit to ensure uniform distribution of all ingredients. In a clean **mixing** container, blend 2 Parts A and 1 Part B using a drill mixer for 2-3 minutes. Up to 10% clean water may be added AFTER blending Parts A and B to help reduce roller marks, orange peel, etc. Avoid creating a vortex in the material which could introduce air and/or moisture content to the mixture. Do not mix more than can be applied within the usable pot life time frame. **DO NOT THIN!**

APPLICATION: Using a brush and/or 3/8" nap roller and a roller pan, dip and roll. 18" rollers are recommended for any surface to speed up application time and reduce roller marks. Start by placing the wet roller at one corner of an approximate 4' x 4' square and roll the material at an angle to opposite corner applying no pressure to the roller. Spread the material across only that square and immediately back-roll to even out material and roller lines. Adjust the size of your square as needed based on the amount of material being applied with the roller. After finishing the square, move on to the next square using 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 to ensure proper application results. Apply the 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 joints. An airless or HVLP sprayer may also be used.

RECOATING: If possible, recoat within the suggested recoat window. Apply additional coats in the same manner as the first coat. When working in higher temperatures, always recoat as early in the recoat window as possible to avoid failure between coats. If recoating outside the suggested recoat window or beyond 24 hours, sand using a 60 - 120 grit sanding screen to ensure adequate adhesion between coats. Vacuum dust thoroughly, rinse with clean water 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 acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! If using acetone follow all safety precautions.

PRECAUTIONS AND LIMITATIONS

- All new concrete must be cured for at least 28 days prior to application.
- DO NOT use on Brick.
- 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.

SPECIAL NOTES

Please consult Safety Data Sheet (SDS) and read Warranty information prior to use. FOR PROFESSIONAL USE ONLY!