

# ULTRA SURFACE WB URETHANE (2A:1B) Technical Data Sheet [12/06]

Concrete Solutions - 3904 Riley St. - San Diego, California 92110 - Ph. (800) 232-8311 - Fax (619) 297-3333

**DESCRIPTION:** Ultra Surface WB Urethane (2A:1B) is a water-based, high solids, two component aliphatic polyurethane. It provides a high performance clear coating over exterior or interior surfaces. It dries to a hard, durable film that has excellent resistance to impact, abrasion, and weathering. WB Urethane (2A:1B) offers substantial performance improvements over first generation catalyzed water-based polyurethanes, including higher film build capabilities, improved chemical resistance and resistance to hot tire staining.

**TYPICAL USES:** Ultra Surface WB Urethane (2A:1B) is used for many applications. One of its most popular uses is as the topcoat sealer over our low odor Color Flake System that includes: Epoxy 200 as the prime coat, WB Epoxy color and flakes as the intermediate coat and Aqua Seal and WB Urethane (2A:1B) as the topcoats. It is the ideal low odor topcoat for areas that require maximum gloss retention, ease of cleaning, and resistance to heavy traffic.

Typical areas of application include: clean rooms, hospitals, concrete counter tops and high traffic retail areas. It is also suitable for aircraft hangars, automotive repair facilities and garage floors. WB Urethane (2A:1B) makes an excellent water-based topcoat sealer over Sealcoat 1000 when doing decorative acid stained or dyed concrete floors (see application instructions below).

It can be used over polymer concrete applications such as the squeegee/bond coat, spray texture, broom finish and spray-top applications for extra durability and stain resistance. Use Aqua Seal or Sealcoat 1000 as a prime coat when going over Ultra Surface Polymer Concrete.

**WB Urethane (2A:1B) is available in a satin or gloss finish.**

**SURFACE PREPARATION:** The surface must be clean and sound, free from oil, dirt, waxes and any other contaminants that may interfere with bonding. One method includes scrubbing with detergent, acid washing, neutralizing and pressure washing to clean and rinse. Previously coated surfaces must be mechanically cleaned and abraded using a floor polisher machine with #80-100 grit sandpaper to insure intercoat adhesion. [See the Ultra Surface Products Manual under surface preparation for more detailed information.]

**MIXING INSTRUCTIONS:** Mix only the amount of material that can be used within a 1 hour period at 77 degrees F. Higher temperatures reduce work time. In hot weather, it is advisable to mix smaller batches of 1 ½ gallons at a time. Premix A before adding B. Mixing ratio is 2 parts A to 1 part B. Add part B slowly while mechanically mixing Part A with a slow speed drill. Mix for 3 full minutes until completely homogenized. Material cannot be properly mixed by hand. Use a small one-gallon mixing paddle for mixing small amounts. WB Urethane (2A:1B) is normally applied as is but may be thinned up to 10% with water to achieve a lower viscosity, if desired. Only add water after A and B have been mixed together.

## ULTRA SURFACE WB URETHANE (2A:1B)

### Technical Information

#### Physical Properties

Mixing Ratio, by Volume	2A to 1B
Coverage Rate	200-350 sq. ft./gallon
Solids Content, Clear	53% [by weight]
Application Temperature	50 degrees or above
Pot Life	50 minutes
Dry to Touch (77 degrees)	6 hours
Recoat Time	12 hours
Light Traffic	18 hours
Vehicle Traffic	48-72 hours
Full Cure	7 days
V.O.C.	50 grams/liter

#### Performance Properties

Pendulum Hardness, sec (ASTM D-4336) =	175
Gloss, 60 degrees	90
Tabor Abrasion -1000 gm. Load 1000 cycles, CS 17 wheel =	39 mg. loss

#### Advantages

- Non-Yellowing
- Non-Caulking
- V.O.C. Compliant
- Non-Blushing
- Easy Application
- Satin or Gloss Finish

**APPLICATION INSTRUCTIONS:** Apply at 200-300 sq. ft. per gallon by brush, roller or airless spray. Do not allow to puddle or accumulate in joint areas. Applications heavier than 200 sq. ft. per gallon will create bubbles in the cured coating. If multiple coats are required, and the material has cured for more than 24 hours, de-gloss with a black janitorial pad or fine 100 grit sanding screen.

**CHEMICAL RESISTANCE (ASTM D-1308 24 HOUR IMMERSION)**

Motor Oil .....	no effect
Gasoline .....	no effect
Brake Fluid .....	no effect
Transmission Fluid .....	no effect
Urine .....	no effect
Blood .....	no effect
Black Ink .....	no effect
Xylene .....	no effect
MEK .....	no effect
Mineral Spirits .....	no effect
Hydraulic Fluid #83282 .....	no effect
Skydrol B-4 .....	no effect
Whiskey .....	no effect
10% Hydrochloric Acid .....	no effect
10% Sulphuric Acid .....	no effect
50% Sodium Hydroxide .....	no effect
10% Acetic Acid .....	no effect

**Over Acid Stain and Dye Instructions** - If applying over an acid stained surface the substrate must be neutralized and rinsed and Sealcoat 1000 or WB Epoxy clear must be used as a primer. WB Epoxy is not recommended over green or blue acid stains however, as it will change the color. Earth-tone colors such as tans, browns and black are okay. WB Epoxy can be used over all concrete dye colors and is only for interior floor applications. Sealcoat 1000 can be used indoors or outdoors as a primer over acid stains or dyes prior to applying WB Urethane (2A:1B) gloss or satin. Apply Sealcoat 1000 using an Airless or HVLP sprayer to achieve the best results. Do not apply using a roller over acid stains or dyes. Whenever odors can be tolerated, solvent-based sealers such as Ultra Surface Stamped Concrete Sealer or Acrylic Urethane are generally better over acid stains and dyes to bring out the color of the stain or dye. Our compressor pump-up sprayer or an airless or HVLP is also recommended to achieve the best finish when applying solvent-based sealers.

**Over Color Flake Applications** - Apply Epoxy 200 prime coat and allow to dry for approximately 12 – 15 hours or until dry enough to walk on. Slightly tacky is okay. Apply WB Epoxy color and broadcast flakes to refusal. Allow 4 hours to dry. Sweep and blow off loose flakes to re-use later. Lightly scrape the color flake surface using our metal edge squeegee and blow again. These flakes should be thrown away. Next apply one to two coats of Ultra Surface Aqua Seal as a prime coat over the flakes. Apply WB Urethane 2A:1B as the final topcoat. This system will leave the surface with a bumpy flake texture for extra slip resistance. For indoor jobs away from sunlight, where a smoother finish is desired, use Ultra Surface Epoxy 600 clear in place of the Aqua Seal and then use WB Urethane (2A:1B) as the final topcoat. It is not recommended to use Epoxy 600 in garages, as it can yellow in direct sunlight, unlike the Aqua Seal.

**SLIP/FALL PRECAUTIONS:** Concrete Solutions recommends using slip resistant granules in all outdoor applications where the WB Urethane (2A:1B) will be used and on indoor applications that may be exposed to water, oil or other spills that may cause a slippery environment. Aluminum oxide granules #80 grit or courser may be broadcast into the prime coat to achieve the amount of slip resistance desired. It is the end users responsibility to determine the suitability of a coating for their particular application. Concrete Solutions or its sales agents will not be responsible for injury incurred in a slip/fall accident.

**MOISTURE VAPOR TESTING:** All concrete floors not poured over a proper moisture barrier, are subject to possible moisture vapor transmission or hydrostatic pressure problems, which can cause a coating system to blister or fail. Before applying a coating system over a concrete floor which is on-grade or below grade, the customer should be informed of this potential problem and given the option to have a qualified moisture testing company perform calcium chloride test to give the proper recommendations. Concrete Solutions, Inc. will not be responsible for problems cause by moisture conditions below the surface.

**WARRANTY INFORMATION:** Concrete Solutions guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer’s remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Concrete Solutions makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.