

FOR INDUSTRIAL & COMMERCIAL USE ONLY

TECHNICAL DATA SHEET

1. - PRODUCT NAME/NUMBER & DESCRIPTION

Product Name/Number - WB-2K, Clear

WB-2K[™] is an industrial waterborne, two component (2K), hybrid, densely cross-linked, multifunctional, protective clear topcoat. WB-2K[™] has been engineered with an Eco-Innovative* nano-structure to increase and enhance the life-cycle operation of concrete in its many forms and functions.

Based on an industry award-winning, disruptive coating technology, WB-2K[™] leads the way in sustainability with its ability to successfully address the long term durability, care and maintenance of commercial and industrial concrete assets in a cost effective manner.

WB-2K[™] penetrates deep into the substrate of concrete to form a slip resistant, protective barrier against destructive elements. WB-2K[™] excels in scratch, chip, marring, abrasion, UV and chemical resistance; and it provides extreme protection from the effects of weathering, salt, and moisture/water damage that concrete will encounter during its service life. For cleaning purposes, WB-1K[™] also enables the easy release of surface fouling such as grease, oil, dirt and bio-staining.

* "Eco-Innovation is the development of products and processes that contribute to sustainable development, applying the commercial application of knowledge to elicit direct and indirect ecological improvement." Wikipedia

2. - PRODUCT ADVANTAGES

Advantages:

- Prevents and eliminates damage from extreme UV, abrasion, chip, marring and chemical resistance
- Zero VOC and HAP
- Convenient 1:1 mix ratio by volume
- Prevents biological efflorescence and lime staining
- Fast dry, high throughput

- Extended pot, shelf and service life
- Excellent flexibility
- Penetrates substrate to fill voids and micro-cracks
- Chemically and mechanically bonds to the concrete substrate and surface

Facilitates the cleaning & easy release of:

- Oil
- Grease
- Dirt and bio-staining

3. - PRECAUTIONS

WB-2K^T is for professional use only. Component Parts **A & B** are to be mixed at a ratio of **1:1 by volume**. Attempts to dilute WB-2K^T will greatly affect its efficiency, performance, and long term stability.

4. - PHYSICAL PROPERTIES

Table 1		
Viscosity	20 seconds Zhan 2 cup	
Weight per Gallon (lbs / kg)	8.1 lbs / 3.7 kg	
Weight Solids	50%	
Coverage per Litre (ft² / m² DFT)	211 ft ² / 19.60m ² @ 1 mil. (0.0254 mm) 105 ft ² / 9.75m ² @ 2 mils. (0.0508 mm) 70 ft ² / 6.50m ² @ 3 mils. (0.0762 mm)	
Pencil Hardness ASTM D3363	4H	
Gloss per ASTM D532 (20° / 60°)	86.0 / 92.2	
Air Quality Information	Zero VOC, Zero HAP	
Packaging Options (L / US gal)	20 L / 5 US gal - Plastic UN Container 5 L / 1.3 US gal - Plastic UN Container 208 L / 55 US gal - Drum	

WB-2K[™] Multifunctional Waterborne Clear Topcoat



5. - Additional Information

	Table 2		
NOTE: All information provided is typical (as formulated) and will not represent values for all products.	Dry To Handle	10 minutes @ 125°F (51°C)	
	Shelf Life	Minimum 12 months from date of manufacturing	
	Service Life	Minimum 60 months from date of application	
	Reduction Dilution	Components A & B are supplied in a ready-to-mix form DO NOT DILUTE!	
	Manual Application Equipment	Roller brush, construction grade hand pump pressurized sprayer, acetone resistant pressurized T-Bar sprayer, or paint pad	
	Power Application Equipment	HVLP: Tip Size - 1.4 or 1.5 mm Airless: Tip Size - 0.015 or 0.019 inch	

6. - RECOMMENDED SURFACE PREPARATION & PRE-TREATMENT

Pre-Application Considerations:

The proper application of $WB-2K^{M}$ is very important in order to achieve its optimum properties and performance. The substrate type (material composition) and its surface preparation are <u>*CRITICALLY*</u> important prior to the application of $WB-2K^{M}$. The application parameters for $WB-2K^{M}$ are just as important (or even more important than) achieving the desired physical properties. All surfaces to be coated must be clean, free of loose debris, stains, rust, vegetative growth, efflorescence, graffiti, oil, grease, moss, mildew, chalked/oxidized paint, and any other unsound or foreign materials which can inhibit the penetration, chemical bond, adhesion and long-term performance of $WB-2K^{M}$.

IMPORTANT:	WB-2K [™] + Poor Adhesion	= Failure
	WB-2K [™] + Excellent Adhesion	= 5 Year Service Life

Surface Preparation - Glossy and Oxidized Painted Surfaces

<u>Cleanliness</u>

Surfaces to be coated must be completely dry (with a moisture content of below 3%) and free of grease, oil, soil, biological contaminants, dust, abrasive materials, water soluble salts, chlorides, sulfates, scale, rust and/or other forms of contamination prior to the application of WB-2K[™]. Remove all water soluble salts, chlorides, sulfates, dirt, grease, wax, oil and biological contaminants with an appropriate decontamination agent. Please contact **Assero** or your WB-2K[™] representative for further information.

Standards

SSPC – SP 1: Chemical Cleaning. For loose scale, rust and deteriorated coatings, employ SSPC – SP 2 / 31 GP 401*: Hand Tool Cleaning, or SSPC - SP3 / 31 GP 402*: Power Tool Cleaning. Repeat SP1 post employing SP2 / 401 or SP3 / 402. *Canadian Government CGSB

We highly recommend testing for surface cleanliness using standard **ISO 8502-9** which is a Field method for the conductive determination of water soluble salts.

NOTE: "Soluble salts have a significant effect on the lifetime, and hence the cost, of coating systems and corrosion protection." Bernard R. Appleman, Ph.D., KTA-Tator, Inc. Oct. 1987

Surface Preparation - Newly Painted Surfaces

WB-2K[™] will bond with fresh new industrial coatings in a wet-on-wet process once the solvent has "flashed off". WB-2K[™] will also bond with coatings that have not fully cured. The period to reach full cure for industrial paints/coatings can span from 7 to 30 days post application. Solvent flash and cure time information is available in the manufacturer's product data sheet (PDS). Please qualify application and full cure time before applying WB-2K[™].

If *full cure* has been reached, the coating will require sanding to open up its "pores" for proper chemical bonding to take place with the application of WB-2K[™]. It is recommended that 400 grit sanding be implemented followed by solvent cleaning using acetone.



PATENT PENDING

Standard **SSPC - SP 1**: As with any cleaning solution, it's important to review and follow the manufacturer's instruction for its use and safe disposal according to local, state/provincial, and federal regulations. These are the recommended methods for surface preparation and pre-treatment.

7. - MIXING

Mixing: 1:1 ratio by volume only

8. - APPLICATION GUIDELINES

General: Always pre-test WB-2K[™] on uncoated concrete to verify suitability of the application.

WB-2K[™] will penetrate deeply into uncoated concrete, so an application of two wet coats of WB-2K[™] @ 1.5 - 2.0 mils per coat is required and must be allowed a dwell time of 20 - 30 minutes so that a "top finish coat" can be established without further penetration.

A 3^{rd} "finish top coat" (or 4^{th} if needed) must be applied with the addition of a slip resistant additive such as "**Sure Step**" or "**Shark Grip**". Please follow product instructions for adding to WB-2KTM.

Table 3	
Recommended Wet Film Thickness (WFT build)	1.5 to 2.0 mils. per coat with 5 - 10 minutes between coats
Recommended Finish Top Coat (WFT build)	1.0 to 2.0 mils
Top Finish Recoat Time	10 - 15 minutes
Ambient Cure Time	Pot life is 30 minutes @ 72 °F / 22.2 °C
Dust-Free Time	30 min. @ 72 °F / 22.2 °C
Dry-to-Touch Time	1 hour @ 72 °F / 22.2 °C
Recommended Dry Film Thickness (DFT)	2.5 - 3.0 mils
Full Cure Time / Return to Service	24 hours

DO NOT apply WB-2K[™] if the material or substrate temperature is below 55°F (12.8°C). WB-2K[™] is best applied when the surface and air temperature are between 55°F to 90°F (12.8° to 32°C) and the relative humidity (R.H.) is at 50% during both application and cure time.

For additional information, please refer to the Assero Technical Guide for Concrete, NCI / WB-2K.

9. - CLEANUP

Before WB-2K[™] is fully cured, equipment and minor spill cleanup can be accomplished using acetone, butyl acetate or MEK.

Dispose of cleaning materials appropriately. Local, state/provincial, city, and federal laws and regulations may apply to releases and disposal of materials and items employed in the clean up. You will need to determine which federal, state/provincial, city, and local laws and regulations are applicable.

10. - STORAGE

Inspect condition of all containers and totes to ensure compliance. WB-2K[™] should be stored in tightly sealed containers between 45°F - 80°F (7.2°C - 26.7°C) to ensure long shelf life.

WB-2K[™] has a storage life of approximately 12 months from the date of manufacture, and provided that the product is stored in its sealed original containers.

DO NOT ALLOW TO FREEZE



11. - HEALTH & SAFETY PRECAUTIONS

WB-2K[™] is safe to use and apply when recommended precautions are followed. Before using this product, **please** read and understand the **Safety Data Sheet (SDS)**, which provides additional information on health, physical, and environmental precautions, as well as first aid recommendations and safe handling protocols.

12. - TECHNICAL SERVICES

Please contact the experienced and professional staff at **Assero Coating Technologies** for answers to any technical questions regarding product-specific information.

13. - DISCLAIMER / LIMITATIONS OF LIABILITY

The data contained within this Technical Data Sheet represents typical values. Since application variables are a major factor in product performance, this information should serve only as a general guide. The environmental conditions present at the time of application, the proper preparation of the substrate, consideration for the use case of the asset to be coated, and the skill of the applicator, are all significant factors in the performance of this product. No warranty or liability for the performance of the product will be accepted unless specifically agreed to by us in writing. ASSERO COATING TECHNOLOGIES and NANOVERE Technologies, LLC assumes no obligation or liability for use of this information. ASSERO AND NANOVERE WILL NOT BE LIABLE FOR ANY SPECIAL, INDICIDENTAL OR CONSEQUENTIAL DAMAGES.

14. - COMPANY INFORMATION



For more information, and for current pricing, please contact:

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RESELLER CONTACT INFORMATION