

# TDS WB Anti–Graffiti Water Born Acrylic Polyurea

**WB** Anti-Graffiti (WBAG) coating represents a new class of tough thin and durable advanced Water Born Acrylic Polyurea. This easy to apply coating turns ordinary substrate into a cleanable canvas. Its unique physical properties give it superior cleanability and resistance to solvent markers, most paints and stands under corrosive atmosphere terms (in case of anti-corrosion request special anti-corrosive additive will be added to the material). Universal rubbing alcohol is used as the cleaner fluid with a dry clean rag. The Anti-Graffiti Coating is used on school room walls to replace blackboards and dry erase boards, subway walls and ceilings to provide easier paint removal, hospital walls and floors to enable easy clean up sanitary surfaces, protect outdoor building walls, steel and concrete bridges members, public bathroom walls and any surface indoor or out, which requires graffiti protection or to aid in cleaning. Furthermore, this polyurea material creates a highly durable coating layer, suitable for industrial atmosphere with excellent resistance. Suitable for metal constructions, storage tanks, rail carts, wagons, truck trailers etc.

This 70% solid 2-component coating is water based and therefore is easy to clean up using iso propyl alcohol 70%. It is easily applied using roller, air-less spray machine or brush. Pot life after mixing is 30 - 60 minutes with air dry tack free surface time of 45 minutes depending on ambient humidity. It may be formulated in just about any color or clear as its natural state. It exhibits a high functioning temperature of 220°F (104°C), excellent abrasion and outdoor UV stability. It remains flexible at 32°F (0°C) and can withstand light mild solvent attack. Given this material extraordinary clean-ability and durability characteristics it lends itself to many diverse demanding applications.

Please contact our technical support group for specific material systems, substrate application procedures, application equipment, recommended safety gear and clean-up procedures. Refer to SDS for material and safety standard procedures.



Manufacturers and refurbishes of rail vehicles demand innovative, easy-to-use anti-graffiti coating systems. WBAG Acrylic Polyurea is a high gloss coating, extremely durable, with excellent cleaning properties and resists not only to graffiti but also to airborne debris and chemicals.



## Health and Safety

Read the Safety Data Sheet (SDS) and container labels for detailed health and safety information. This product is intended for industrial use by properly trained professional applicators only.

#### **Physical Properties**

Optical Clarity	Visual	Clear
Tensile Strength	ASTM D412	3410 psi
Elongation	ASTM D2256	350%
Hardness – Shore D	ASTM D785	45D
Taber Abrasion CS17	ASTM D4060	60mg/1k cycles
Gel Time	Time	45 min
Mix Ratio	PBV	1:2

## Adhesion Results of Typical Substrates (per ASTM D-4541 Elcometer)

Concrete - Primed	> 150 psi	Excellent bonding
Steel - Primed	> 150 psi	Excellent bonding
Wood - Primed	> 150 psi	Excellent bonding
(*) All substrates primed with WBJE primer		

#### **Mix Ratio**

Read product labels and application instructions prior to use. Mix WBAG Hardener (A-Component) and Resin (B-Component) at a ratio of 1A – 2B by volume. Mix with a variable speed drill utilizing a Jiffy Mixer to suspend any settled pigment and attain a uniform color. After mixing parts A and B, stir thoroughly and give the mixture a 10 min induction time prior to application.





# **Technical Application Data**

WBAG is a two component 70% solids high performance aliphatic polyurea coating formulation which does not contain VOCs and It has very low odor. Application temperature ranges from 60°F (16°C) to 100°F (37°C). This material should not be applied to hot surfaces above 110°F (43°C). Working time at 75°F (24°C) is approximately 25 min -1 hour depending on ambient temperature Functional operation temperature ranges from -40°F (4.5°C) to 200°F (93°C). WBAG is designed as a "Thin-Mil" coating and is not to be applied in thicknesses greater than 4-6 mils (100-150 microns) at one time. Coverage is approximately 400 sq. ft./ (37 m2) mixed gal.

#### **Recommended systems:**

**For 100-200 microns** – you may use WBAG directly on a prepared surface without any primer. **For thicker systems (300 micron)** – use WBCS (non-anti-graffiti) as a primer (100-150 microns), than apply WBAG as a clear top coat (150 microns).

(\*) If pigment is required add to base coat.

(\*\*) Orange lemonine cleaners or iso propyl alcohol 70% is to be used to remove graffiti markings.

Please contact our technical support group for any questions.

#### **Substrate Surface Preparation**

The surface must be clean, dry, stable and without loose areas or parts. All residues of fats, dust, dirt, salts or any other unrelated materials should be fully removed in order to ensure the adhesion of the coating to the surface. Leveled, stable, pollutant free and free from the loose parts is a guaranteed basis for the long lifespan of the system and achievement of the result.

**Concrete** must be fully cured, clean, free of contaminates, acids or alkaline and dust prior to primer / coating application. Concrete should be prepared with a sandblasting, diamond grinding or machine sanding depending on the severity of the concrete surface condition. Note: The total thickness of MGAG is 150 - 200 microns, one should take in consideration that the final result is a mirror effect of the substrate. For a smooth end result, it is recommended to plaster the concrete substrate. If the wall is plastered and painted, make sure to remove old flake paint and clean dust prior to coating application.

**Metal** must be clean, free of contaminates and dust prior to primer / coating application. Metals should be prepared with a sandblasting, shot blast or machine sanding depending on the severity of the surface condition. Spraying aggregates using compressed air (it is recommended to manually remove peeling layers of paint, rust peels and welding residues using manual or pneumatic scrapers before spraying) to get a surface level in a cleaning level so SA 2.5 (in accordance with the standard SIS 055900) in order to remove rust, loose parts, old paint, fats etc. from at least 95% of the area (in accordance with the standard SSPC-SP10). Perform dust cleaning using air pressure (fat and humidity free) or using a vacuum cleaner. In cases when aggregate spraying cannot be performed use mechanical or manual tools for careful cleaning using a disc, steel brush, sandpaper and scraper to remove mill scales, rust, layers of loose paint and pollutants up to a cleaning level of ST-3 in accordance with the standards SSPC-SP3, SSPC-SP11.



Call or e-mail our Tech Support Group for assistance in application and preparation.

It is always best to perform a test within a small section of the application area prior to full scale engagement.

#### Warranty

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