WBE-3

Two-Component Water Base Epoxy

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

WBE-3 is a water base aliphatic epoxy formulation with a silicone backbone built into the Hardener (A-Side) giving it superior chemical and UV resistant properties. It is a two-component system with 75% solids containing no VOC's and is designed to be used as a self-prime or finish coat. WBE-3 has a long pot life of up to 8 hours after mixing the Hardener (A-Side) and Resin (B-Side) together. WBE-3 exhibits fast cure times of less than 20 minutes in 16 mil or less film thickness and can be used on concrete, asphalt, steel, aluminum and wood. WBE-3 can also be combined with nano size glass filler to achieve a non-skid type surface; glass filled WBE-3 cures to a matte finish. Because of its long pot life, WBE-3 can be used as road line application using conventional equipment.

WBE-3 PHYSICAL PROPERTIES

		REGULAR	GLASS-FILLED
Flex Modulus	ASTM D624	500 kpsi	800 kpsi
Tensile Strength	ASTM D412	9200 psi	9500 psi
Elongation	ASTM D412	18%	18%
Heat Deflection Temp.	ASTM D648	175°F	190°F
Relative Humidity	ASTM F2170	85%	85%
Taber Abrasion CS18	ASTM D4060	75 mg	75 mg
Pot Life	Time	8 hours max	6-8 hours max

MIX RATIO

Read product labels and application instructions prior to use. Mix WBE-3 Hardener (A-Side) and Resin (B-Side) 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. For glass-filled WBE-3, mix in the nano-glass filler AFTER combining the Hardener and Resin. Glass filler can be added up to 100% of the combined liquids.

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.

WBE-3 VARIABLE RATIO ADJUSTMENTS (INCREASE OR DECREASE UP TO 20%)

	EXCESS HARDENER (A-Side)	EXCESS RESIN (B-Side)
Pot Life	Increase	Decrease
Flexibility	Increase	Decrease
Hardness	Decrease	Increase
Better Solvent	Increase	Decrease
Resistance	Decrease	Increase
Acid Resistance	Increase	Decrease
Adhesion	Increase	Decrease
Water Resistance	Decrease	Increase
Corrosion	Decrease	Increase

TECHNICAL APPLICATION DATA

Substrates must be fully cured and cleaned prior to any coating operation. The cleaning operation must not leave any residual detergents, acids or alkali cleaners. Concrete flooring should be prepared with shot blasting (SPCC min. 2), diamond grinding and/or machine sanding depending on the severity of the concrete surface condition. When using WBE-3 for coating steel, the substrate should be shot blasted to an sspc 4-6 mils profile. After shot blasting the substrate should be clean and dry. There should be no visible rust prior to coating. After substrate is properly prepared, WBE-3 self-priming material should be applied within 45°F to 100°F. It is recommended that WBE-3 be applied as a primer coat to the bare substrate which will actively penetrate any porous surface. This primer coat should also be slightly A-Side rich to promote excellent chemical bonding for the sequentially applied base coat. This is accomplished by increasing the A-Side ratio by 10-12% by volume. Primer coat should be applied at 4-6 mil thickness. After the prime coat is dry to the touch, apply the WBE-3 base coat. For non-skid flooring, use Glass-Filled WBE-3. Apply 8-10 mils of coating. Glass-Filled WBE-3 will dry to matte finish; for gloss finish, top coat with clear WBE-3. To reduce viscosity 5% water may be added. WBE-3 may be applied using rollers, brush or air-less spray.

www.superskinsystems.com

100 Petty Road, Suite C | Lawrenceville, GA 30043
PH: 404-216-4711 | 404-229-8343 | 404-299-1505

SUPERSKINSYSTEMS

WBE-3

Two-Component Water Base Epoxy

Pot life of the mixture is up to 8 hours. There is no end point on gel like conventional epoxy, so do not use the mixture after 8 hours. Coverage at 8 mils is 300 sq. ft. / mixed gal.

CHEMICAL RESISTANCE CHART

21 Day Immersion Test ASTM D3912

Chemical Name	Results @ 25°C
Acetic Acid	R
Acetone	R
Ammonium Hydroxide (14%)	R
Brake Fluid	R
Brine-Saturated Water (310g/l)	R
Clorox (10%) Water	R
Diesel Fuel	R
Gasoline	R
Gasoline 5% MTBE	R
Gasoline 5% Methanol	R
Hydrochloric Acid (25%)	R
Hydrochloric Acid (10%)	R
Hydraulic Fluid	R
Isopropyl Alcohol	R
Lactic Acid	R
MEK	R
Methanol	R
Methylene Chloride	C
Mineral Spirits	R
Motor Oil	R
MTBE	C
Muriatic Acid (10%)	R
NaCl Water (10%)	R
Nitric Acid (20%)	RC
Phosphoric Acid (10%)	R
Phosphoric Acid (50%)	R
Potassium Hydroxide (10%)	R
Potassium Hydroxide (20%)	R. Dis
Skydrol	R
Sodium Hydroxide (25%)	R. Dis
Sodium Hypochlorite (10%)	R
Sodium Bicarbonate	R
Stearic Acid	R
Sugar Water	R
Sulfuric Acid (10%)	RC
Sulfuric Acid (30%)	NR
Toluene	R
Trisodium Phosphate	R
Vinegar Water (5%)	R
Water	R

72 Hour Spot Test Chemical Resistance Data

WBE-3

Chemical	Rating
NHO_3 50%	8
HCL 37.5%	9
NaOH 50%	8
H_2SO_4 50%	8
HI 57%	8
H_3PO_4 50%	8
Brake Fluid	10
Anti-Freeze	10
Motor Oil	10

Rating Guidelines	
0-1	75-100% Film Dissolved
1-2	50-75% Film Dissolved
2-3	25-50% Film Dissolved
3-4	1-25% Film Dissolved
4-5	Film damage severe, cracking, pinholes
5-6	Film moderate to heavy damage, swollen, dulled
6-7	Film moderately damaged, haze, residue
7-8	Film with slight or no damage, slight haze, residue
8-9	Film in very good condition
10	Film unchanged, excellent condition

***NOTES:**

--All samples using 57% HI had purple iodine discoloration due to the nature of the acid in the air

--Samples were placed at room temperature for 72 hours after application of 1 ml of solvent on 16 mil film of product

CHART KEY

R – Recommended (little or no visible damage)

RC – Recommended Condition (swelling or discoloration)

C- Conditional (crackling – wash down within 1 hour)

NR – Not Recommended

Dis. – Discoloration

www.superskinsystems.com

100 Petty Road, Suite C | Lawrenceville, GA 30043
PH: 404-216-4711 | 404-229-8343 | 404-299-1505

SUPERSKINSYSTEMS

WBE-3

Two-Component Water Base Epoxy

Water (14 days @ 82°C)	**R**
Xylene	**RC**

www.superskinsystems.com

100 Petty Road, Suite C | Lawrenceville, GA 30043
PH: 404-216-4711 | 404-229-8343 | 404-299-1505