PRO INDUSTRIAL™

113.20 HI-BILD WATERBASED CATALYZED EPOXY

PART A	B71-100	SERIES
PART B	B71V100	HIGH LUSTER HARDENER
PART B	B71V110	LOW LUSTER HARDENER

CHARACTERISTICS

Pro Industrial Hi-Bild Waterbased Catalyzed Epoxy is a high performance, interior/exterior, VOC compliant, low odor, high film build, two-component, water based acrylic epoxy. It dries to a tough, tile-like finish that exhibits excellent durability and performance properties.
Pro Industrial Hi-Bild Waterbased Catalyzed Epoxy resists: moisture, abrasion, select chemicals, impact, and yellowing.

Color: Most colors
Recommended Spread Rate per coat:

Wet mils:	10.0 - 15.0
Dry mils:	4.0 - 6.0
Coverage:	110 - 170 sq ft/gal approximate

Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 10.0 mils wet, 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	2 hrs	1 hr	30 min
To handle	16 hrs	12 hrs	8 hrs
To recoat:			
minimum:	4 hrs	2 hrs	1 hr
maximum:	30 days	30 days	30 days
To cure:	30 days	14 days	7 days

If maximum recoat time is exceeded, abrade surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.

Mix Ratio: 4:1
Pot Life: 8 hours @ 77°F, 50% RH
Sweat-in Time: 15 min. @ 77°F, 50% RH

Finish: High and Low Luster
Flash Point: 230°F, SETA, mixed
Tint Part A with BAC or Envirotoner at:

Base	oz/gal	Strength
Extra White	0-4	100%
Deep Base	8-12	100%
Ultradeep Base	8-12	100%

B71W111 (may vary by color)
VOC (EPA Method 24): <250 g/L 2.08 lb/gal, mixed
Volume Solids: 42% ± 2%, mixed
Weight Solids: 52% ± 2%, mixed
Weight per Gallon: lb

SPECIFICATIONS

Steel
1 ct: Waterbased Tile-Clad Primer
1-2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Steel
1 ct: DTM Acrylic Primer/Finish
1-2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Steel
1 ct: Pro-Cryl Universal Primer
1-2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Drywall:
1 ct: PrepRite 200 Primer
1-2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Galvanized
2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Masonry
1 ct: Heavy Duty Block Filler
1-2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

Masonry, smooth
2 cts: Pro Industrial Hi-Bild WB Catalyzed Epoxy

System Tested:
Substrate: Steel
Surface Preparation: SSPC-SP10/NACE 2
Primer: 1 ct. WB Tile-Clad Epoxy Primer
Finish: 1 ct. Pro Industrial Hi-Bild WB Catalyzed Epoxy

Adhesion:
Method: ASTM D4541
Result: 751 psi

Exterior Durability:
Method: 1 year
Result: Excellent, chalks

Pencil Hardness:
Method: ASTM D3363
Result: HB

Thermal Shock:
Method: ASTM D2246, 12 cycles
Result: Passes

Wind Driven Rain:
Method: Federal Spec. TT-C-555B
Result: Passes
Hi-Bild WB Catalyzed Epoxy only

Abrasion Resistance:
Method: ASTM D4060, CS10 wheel, 1000 cycles 1 kg load
Result: 141 mg loss

Dry Heat Resistance:
Method: ASTM D2485
Result: 180°F, intermittent 200°F

Flexibility:
Method: ASTM D522, 180° bend 1/8" mandrel
Result: Passes

Impact Resistance, Direct:
Method: ASTM D2794
Result: 42 in. lb.

Impact Resistance, Indirect:
Method: ASTM D2794
Result: 24 in. lb.

Resists fumes, splash, and spillage of mild acids, alkalies, salts, aliphatic and aromatic hydrocarbon solvents, and lubricating oils (ASTM D3912).

continued on back

113.20
PRO INDUSTRIAL™
HI-BILD WATERBASED CATALYZED EPOXY

PART A **B71-100** **SERIES**
PART B **B71V100** **HIGH LUSTER HARDENER**
PART B **B71V110** **LOW LUSTER HARDENER**

SURFACE PREPARATION

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.
Do not use hydrocarbon solvents for cleaning.
Steel - Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel within 8 hours or before flash rusting occurs.
Galvanized Steel - Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

SURFACE PREPARATION

Concrete - New - For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 03732, CSP 1-3. Surface must be clean, dry, sound, and offer sufficient profile to achieve adequate adhesion. Minimum substrate cure is 28 days at 75°F. Remove all form release agents, curing compounds, salts, efflorescence, laitance, and other foreign matter by sandblasting, shotblasting or mechanical scarification. Refer to ASTM D4260. Rinse thoroughly to achieve a final pH between 8.0 and 11.0. Allow to dry thoroughly prior to coating.
Concrete - Old - Surface preparation is done in much the same manner as new concrete; however, if the concrete is contaminated with oils, grease, chemicals, etc., they must be removed by cleaning with a strong detergent. Refer to ASTM D4258. Form release agents, hardeners, etc. must be removed by sandblasting, shotblasting or mechanical scarification. If surface deterioration presents an unacceptably rough surface, Kem Cati-Coat HS Epoxy Filler/Sealer is recommended to patch and resurface damaged concrete.

APPLICATION

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be complaint with existing VOC regulations and compatible with the existing environmental and application conditions.
Reducer/Clean Up ..... Water
Airless Spray
Pressure ..... 2400 psi
Hose ..... 3/8" ID
Tip ..... .019" - .023"
Filter ..... 60 mesh
Reduction
..... as needed up to 6% by volume
Brush ..... Nylon/Polyester
Reduction ..... Not recommended
Roller Cover ..... 3/8" woven
Reduction ..... Not recommended

CLEANUP INFORMATION

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturers safety recommendations when using mineral spirits.

CAUTIONS

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.

Shelf Life: 12 months, unopened
Store indoors at 40°F to 100°F.

See label for additional cautions.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Sheet.
HOTW 11/15/2006 B71W111 10 00