



# Altra~Shield® WB-V

## Waterborne Gloss Epoxy

### Data Sheet

#### FEATURES

Altra~Shield® WB-V is a two pack low VOC waterborne epoxy. The cured film presents a non-yellowing gloss finish with high surface hardness and excellent flexibility. It exhibits excellent adhesion and water resistance, and is tolerant of application over damp surfaces. It has excellent solvent resistance which makes it resistant to most graffiti removers. Self-priming over concrete, plaster and fibre cement substrates.

- Brushing and rolling properties similar to single pack waterborne paints.
- Tolerant of application over damp surfaces.
- Quick tack free and recoat times giving the potential for multiple coats to be applied in a single day.
- High surface hardness with excellent resistance to abrasion.
- Excellent resistance to chemicals, solvents and water.
- Tenaciously adheres to a wide range of surfaces.
- Can be steam cleaned or power washed.
- Readily available in pastel tones tintable from white.

#### Approval

- AsureQuality - Global Proficiency Ltd
  - Assessed & passed for food / beverage including dairy farm & factory non-incident contact. Ref: H3104

#### RECOMMENDED USES

**Altra~Shield® WB-V is a two pack low VOC waterborne epoxy gloss finish. The cured film is non-yellowing with high surface hardness and excellent flexibility. It exhibits excellent adhesion and water resistance, and is tolerant of application over damp surfaces. It has excellent solvent resistance which makes it very resistant to graffiti. Self-priming over concrete, plaster and fibre cement substrates.**

The chemical resistance is similar to conventional solvent borne epoxies.

Altra~Shield® WB-V is recommended for interior usage or in service conditions not directly exposed to extended periods of sunlight.

The low VOC and exceptionally low odour of Altra~Shield® WB-V makes it an ideal coating for food process areas, hygiene areas and laboratories.

#### Performance Data

- Very good abrasion resistance
- Excellent solvent resistance (when fully cured)
- Excellent resistance to alkalis
- Fair resistance to acids
- Resistant to common CIP chemicals & typical dairy processing by-product exposures as follows:
  - Nitric Acid 5% - 15 hr watch-glass - pass\*
  - Sodium Hydroxide 5% - 26 hr watch-glass - pass\*
  - Lactic Acid 5% - 26 hr watch-glass - pass\*

\*Discolouration or temporary film softening may occur; these phenomena do not necessarily indicate coating failure.

#### SPECIFICATION DATA

**Generic Type:** Two component epoxy  
**Mix Ratio:** 1:1 by volume  
**Pot Life\*\*:** 3 hours at 21°C, 6 hours at 10°C  
**Thinner:** Water  
**Gloss:** Gloss  
**Colour:** White and a limited range of chemically resistant pastel colours  
**Primer:** Not required on cementitious surfaces; contact Altex Technical Services for other surfaces.  
**Pack Sizes:** 4 litre kits

#### \*\*Pot Life Limitation

The mixed product will remain liquid well past its usable pot-life. **Do not apply mixed product beyond the stated pot life at a given temperature.**

**Volume Solids:** 44%  
**VOC:** 66 grams / mixed litre (as supplied)  
**Theoretical Coverage:**  
8.8 m<sup>2</sup> per litre at 50 microns DFT (114 µm WFT)  
**Recommended Wet Film Thickness:**  
110 - 120 µm WFT  
**Recommended Dry Film Thickness (standalone):**  
120-150 microns total (applied in multiple coats)  
**Recommended Dry Film Thickness (over primer):**  
75-150 microns total (applied in multiple coats)  
**Dry Times (minimum):**  
Gloss  
Tack Free: 3 hrs at 21°C; 5 hrs at 10°C  
Recoat: 4 hrs at 21°C; 6 hrs at 10°C

## SURFACE PREPARATION

### Concrete:

Degrease according to SSPC SP1 solvent cleaning. Leave new concrete to cure for a minimum of 28 days before painting.\*\* Concrete floors must be profiled by captive blasting, light abrasive blasting, diamond grinding, or acid etching. Prepared surface must have a uniform surface texture exposing the aggregate resembling 180 grit sandpaper. If this is not achieved repeat profiling method until the required surface texture is achieved.

Concrete must have the required profile and be free from oil, grease, dirt, and form oils/release agents. Concrete surfaces cured with curing compounds must be prepared by diamond grinding, captive shot or light abrasive blasting.

Acid etching is not acceptable as this procedure will not normally remove these compounds.

After profiling using one of the above recommended methods, fill holes, voids, etc by application of Carboguard 510 SG water-borne cementitious epoxy or Carboguard 695 Epoxy Patching Mortar. Seal with Altra~Shield® WB-V thinned up to 10%.

Note: For flooring or heavy duty service extended cure of concrete is recommended, preferably to 28 day 20°C / 50% RH equivalent.

### Fibre cement:

Clean down to remove all dirt, dust and loose material. Ensure surface is free from oil, grease and mould. Seal with this product thinned 10%. Allow to cure for 24 hours then lightly sand surface to remove raised fibres.

### Steel:

Degrease according to SSPC SP1 solvent cleaning. Remove all weld spatter and grind sharp edges and weld seams. For best results, blast clean to AS 1627.4 Class 2½ (SSPC SP10) minimum and prime with Carboguard 504 at 50 microns DFT, or Carboguard 635 or 636 at 125 microns DFT. Where increased atmospheric corrosion protection is required prime with Carbozinc 859 EZ2.

### Maintenance Repaints:

Altra~Shield® WB-V may be applied as a maintenance coat over aged enamel and two pack epoxy and polyurethane systems. Consult manufacturer for guidance on surface preparation methods when using this product for maintenance painting. A test patch is always recommended to check adhesion and compatibility.

## DIRECTIONS FOR USE

### Mixing:

Altra~Shield® WB-V is supplied as a base and a hardener (half full Part A 4 litre and 2 litres Part B). TO ENSURE THE CORRECT MIX RATIOS ARE ACHIEVED, MIX ENTIRE UNITS.

Thoroughly mix both the Base and Converter individually until a smooth, homogenous mix is achieved.

To one part by volume of base add one part by volume of hardener. Mix these thoroughly either by hand or by power tool until they are perfectly homogeneous.

### Pot Life:

3 hours at 21°C, 6 hours at 10°C

Mixed product will remain liquid well past its pot life.

DO NOT APPLY MIXED PRODUCT BEYOND STATED POT LIFE AT A GIVEN TEMPERATURE.

### Application:

Apply by brush or PAL Hi-Solids roller.

Spray application can be used for flooring applications. It can be spray applied to vertical surfaces but the recommended system dry film thickness cannot, and must not be achieved with successive wet on wet passes.

## PRECAUTIONS

For industrial use only: Read and follow all the caution statements on this Product Data Sheet, the product label and the Safety Data Sheet (SDS) for health and safety information prior to use.

Users should ensure that they are familiar with all aspects concerning safe application of this product. IF IN DOUBT, DO NOT USE THIS PRODUCT.

**Altra~Shield® WB-V Finish** is corrosive & a skin irritant. May cause eye and skin irritation. Use with adequate ventilation. Do not breathe vapour or spray. Wear suitable protective clothing such as gloves and eye and face protection.

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