



# Epoxy VTB (Qualipur 172)

## 1. General Description

Laykold Epoxy VTB (Qualipur 172) is a unique 2-component, low viscosity, moisture tolerant epoxy primer/sealer that prevents the transmission of moisture and water vapor through concrete slabs (topside vapor barrier). Laykold Epoxy VTB (Qualipur 172) reduces water vapor transmission levels of up to 25 lb/24 hr • 1,000 ft<sup>2</sup> (100% Relative Humidity).

## 2. Safety Guidelines

Refer to SDS. Always wear the recommended personal protective equipment. Avoid contact with eyes, skin, and clothing. Adequate ventilation is required during the application process.

Part A – irritant; sensitizer – contains epoxy resin

Part B – corrosive; sensitizer – contains amines

## 3. Storage and Packaging

Laykold Epoxy VTB (Qualipur 172) should be kept dry, cool and in original packaging. Laykold Epoxy VTB (Qualipur 172) has a shelf life of 1 year.

Packaging: 2.5 gallon kit

- Part A – Resin (7.74 kg)
- Part B – Hardener (2.86 kg)

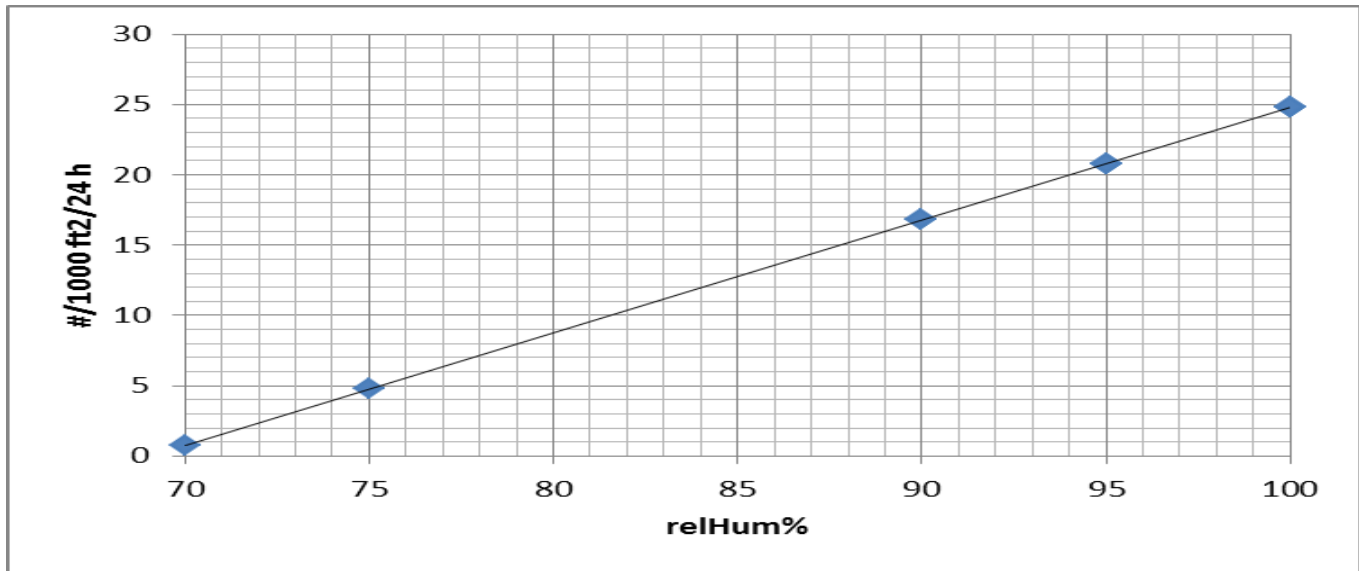
## 4. Coverage

Laykold Epoxy VTB (Qualipur 172) Application Rates and Yield of 2.5 Gallon Kit				
Moisture Vapor Emission Rate (per ASTM F 1849) lb/24 hr • 1,000 ft <sup>2</sup>	Relative Humidity (RH) (per ASTM F 2170)	Application Rate ft <sup>2</sup> /gal	Yield per 2.5 gal kit ft <sup>2</sup>	Approximate Thickness mils
0-17	<90%	130	325	12
17-21	90-95%	100	250	16
21-25	100%	90	225	18
Stand-alone coating on slab		80	200	20
New concrete (minimum 5 days old)		90	225	18

**NOTE:** All values theoretical. Application thicknesses are approximate. Some variation may apply due to porosity and absorption of substrate

### Features and Benefits

- ✓ Topside vapor barrier
- ✓ Low VOC
- ✓ Reduces MVER of up to 25 lb (100% RH)
- ✓ Good penetration into pores and substrate
- ✓ Tested according to ASTM D 7324
- ✓ Covers new concrete (minimum 5 days old)
- ✓ Applied to dry or damp concrete



### 5. Installation Guidelines

#### Water Vapor Emission Testing

All areas to be treated must be tested in accordance with F 1869-98 (Anhydrous Calcium Chloride testing) or probe testing per ASTM F 2170 to determine the MVER (moisture vapor emission rate) in lb/24 hr • 1,000 ft<sup>2</sup> or RH (Relative Humidity) content (%).

#### Contaminants Testing

Slabs with unknown history should be tested for contaminants (i.e. hydrocarbons, other organic compounds, unreacted silicates, ASR, sulfurous compounds) to determine suitability for Laykold epoxy VTB (Qualipur 172).

#### Substrate Preparation

Concrete must be structurally sound, free of deleterious materials, and capable of withstanding abrasive shot blast surface preparation.

1. Remove existing floor coverings, coatings, adhesives, curing compounds, efflorescence, dust, grease, laitance, etc. down to bare concrete with steel shot blasting, scarifying, or grinding using a diamond cup blade (run with low RPM and assure that surface is profiled). Standard acid etching is **NOT** allowed.
2. Steel shot blast or abrasive blast concrete slabs to surface profile ICRI CSP 3
3. Burn off reinforcing fibers and vacuum remains
4. Repair larger cracks with a suitable patching mortar





# Laykold®

## Epoxy VTB (Qualipur 172)

### Mixing

Use chemical resistant gloves and goggles when mixing or applying Laykold Epoxy VTB (Qualipur 172). Product should be a minimum 60°F (15°C) at time of mixing. Part A and Part B are supplied in the appropriate mix ratio. Allow Part B to drain completely into Part A. Mixing is accomplished mechanically with an appropriate mix paddle. Mix for 4-5 minutes at about 300 rpm to a homogenous, streak free consistency. Avoid any action that may entrap air. Ensure that the material at the pail bottom and sides are agitated. **DO NOT THIN**. Pour mixed material from the mixing container into a clean container and carefully mix once more to be certain of consistency (approximately 30 seconds).

### Installation

Pour a sufficient quantity over the area to be treated and uniformly distribute with a notched squeegee. Follow with a non-shed roller, back rolling at a right angle (90°) to the squeegee application to achieve a uniform coverage. Allow the primer to cure for 8 hours before proceeding with additional coatings. If going from Laykold Epoxy VTB (Qualipur 172) to acrylics, Laykold Masters Bond-Kote must be used as a PU/Acrylic interface adhesion promoter.

**NOTE: Laykold Epoxy VTB (Qualipur 172) must be coated within 24 hours of application, or if it becomes contaminated or dirtied (including rain), Laykold Epoxy VTB (Qualipur 172) must be lightly sanded and solvent wiped to promote proper adhesion of Laykold Masters Bond-Kote.**

## 6. Limitations

- Minimum surface and application temperature: 10°C (50°F)
- Maximum surface and application temperature: 54°C (130°F)
- Do not apply over any gypsum based products or unprotected surfaces or surface where water has accumulated (puddles)
- Do not use as a wear surface
- MVER may fluctuate within slab areas and can have significant seasonal variations
- Product is not UV stable and needs top coated after installation



ADVANCED POLYMER TECHNOLOGY CORPORATION believes the information herein to be true, accurate and reliable. However, recommendations or suggestions are made without guarantee. Since conditions and disposal are beyond our control, ADVANCED POLYMER TECHNOLOGY CORPORATION disclaims any liability incurred in connection with the use of our products and information contained herein; no warranty, express or implied is given nor is freedom from any patent owned by ADVANCED POLYMER TECHNOLOGY CORPORATION or others to be inferred.



### 7. Technical Data

*Results based on temperature of 23°C (73°F) and 50% Humidity*

VOC		80 g/L*
Viscosity		400-800 cPs
Pot Life		40-50 minutes
Color		Light Grey
Mixing Ratio		100:37 (by weight)
Tack Free Time		5-7 hours
Cure Time – Foot Traffic		24 hours
Cure Time – Final Cure		7 days
Adhesion to Cement	ASTM D 7234	100% Substrate Failure

\*Based on standard formula calculation

Above figures are guide values and should not be used as a base for specifications

Consult the Safety Data Sheet (SDS) for more details

For complete and latest warranty and product information, please visit [www.advpolytech.com](http://www.advpolytech.com)

