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. Laykold Epoxy VTB (Qualipur 172) reduces water vapor transmission levels of up to 25 lbs/24 hrs • 1000 ft2 (100% 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. Refer to SDS.

Part A – irritant; sensitizer – contains epoxy resin
Part B – corrosive; sensitizer – contains amines

3. Storage and Packaging

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

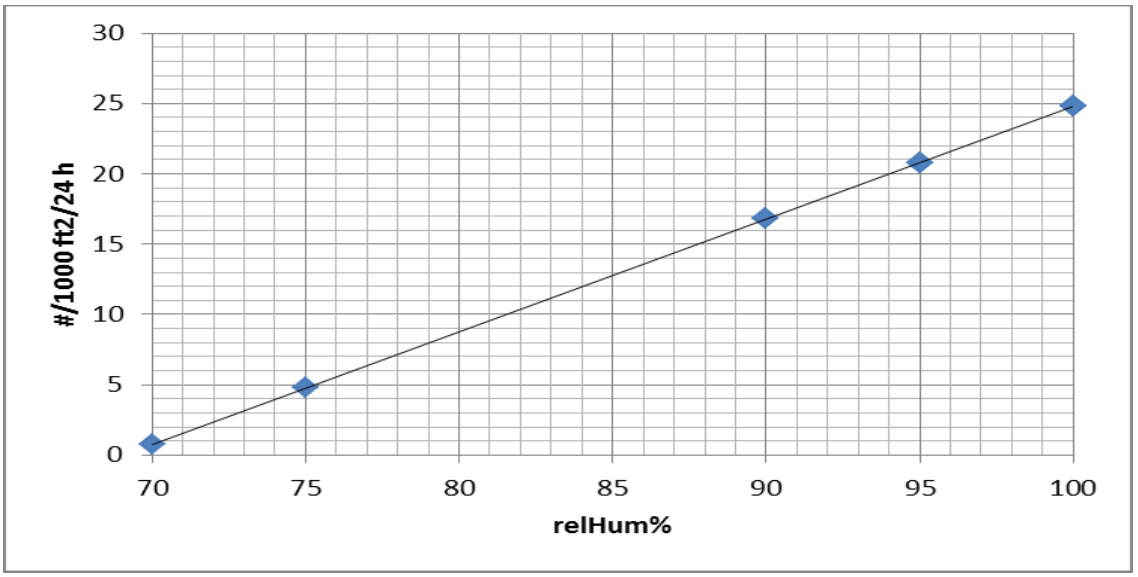
Shelf life is 1 year in closed, original packaging, stored in a dry cool place.

4. Coverage

Features and Benefits

- ✓ Low VOC
- ✓ Reduces MVER of up to 25 lbs (100% humidity)
- ✓ No Flammability concern
- ✓ Good penetration into pores and substrate
- ✓ Tested according to ASTM D7324
- ✓ Covers new concrete (minimum 5 days old)
- ✓ Applied to dry or moist concrete

Laykold Epoxy VTB (Qualipur 172) Application Rates and Yield of 2.5 Gallon kit				
Moisture Vapor Emission Rate (per ASTM F1849) lb/24 h • 1000ft^2	**Relative Humidity (RH)** (per ASTM F2170	**Application Rate** ft^2/gal	**Yield per 2.5 gal kit** ft^2	**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 (min. 6 days old)		90	225	18
Note: All values theoretical. Application thicknesses are approximate. Some variation may apply due to porosity and absorption of substrate.				



5. Installation Guidelines

Water Vapor Emission Testing

All areas to be treated must be tested in accordance with F1869-98 (“Anhydrous Calcium Chloride” testing) or probe testing per ASTM F2170, to determine the MVER (moisture vapor emission rate) in lb/24 hrs•1000 ft2 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 VTB (Qualipur 172).

Substrate Preparation

Concrete must have a minimum tensile strength of 200 PSI, tested per ASTM C1583. 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.

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 in sufficient quantity over the area to be treated and uniformly distribute with a notch 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 to Acrylics, Laykold Masters Bond-Kote must be used as a PU/Acrylic interface adhesion promoter.

6. Limitations

- Do not apply at air or slab temperatures below 50°F (10°C), or above 95°F (35°C).
- Do not apply over any gypsum based products or unprotected surfaces or surface where water has accumulated (puddles).
- Not a wear surface or topping
- MVER may fluctuate within slab areas and can have significant seasonal variations.
- Do not apply where product will receive unprotected exposure to sunlight.
- Do not freeze

7. Technical Data

Results based on temperature of 68°F and 50% Humidity

VOC		80 g/L*
Viscosity		400-800 cPs
Pot Life (Film)		40-50 Minutes
Color		Light Grey
Mixing Ratio		100:37 (by weight)
Tack-Free Time		5-7 Hours
Cure Time – Foot Traffic		24 Hours
- Final Cure		7 Days
Adhesion to Cement	ASTM D7234	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