Epoxy VTB (Qualipur 182)

General Description

Laykold Epoxy VTB (Qualipur 182) 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 182) reduces water vapor transmission levels of up to 25 lb./24 hr. • 1,000 ft2 (100% Relative Humidity).

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.

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 6 days old)
- Applied to dry or damp concrete.

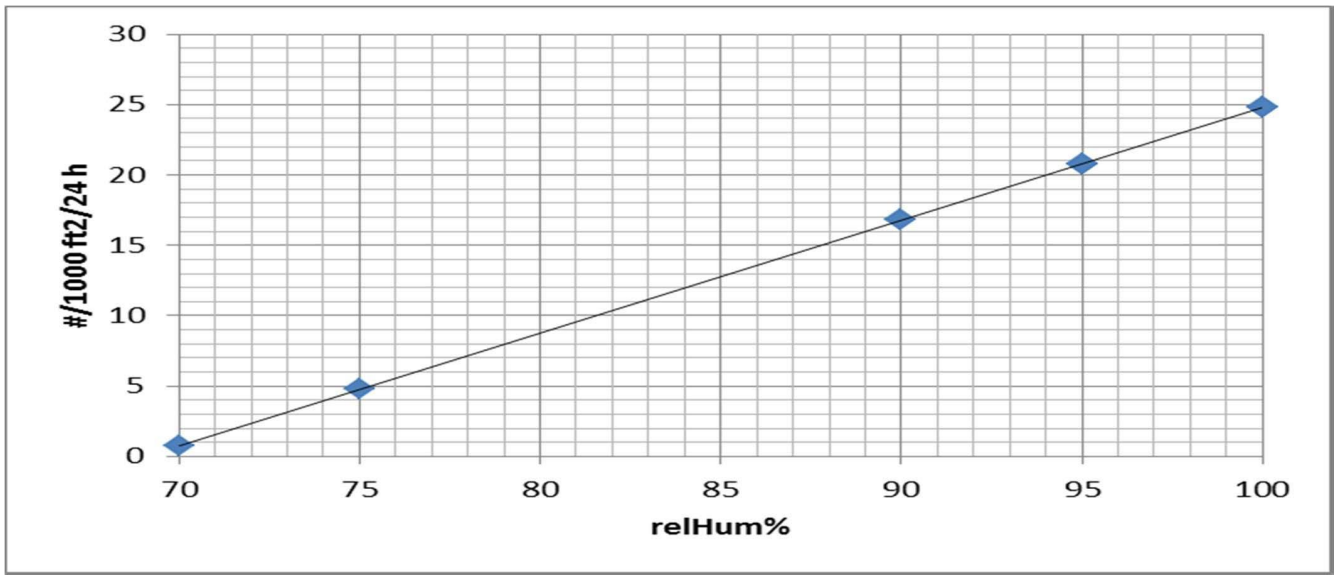
Storage and Packaging

Laykold Epoxy VTB (Qualipur 182) should be kept dry, cool and in original packaging. Laykold Epoxy VTB (Qualipur 182) has a shelf life of 1 year.

Packaging: 2.5-gallon kit
- Part A – Resin (7.74 kg)
- Part B – Hardener (2.86 kg)

Coverage

Laykold Epoxy VTB (Qualipur 182) Application Rates and Yield of 2.5 Gallon Kit				
Moisture Vapor Emission Rate (per ASTM E96)	**Relative Humidity (RH)**	**Application Rate**	**Yield per 2.5-gal kit**	**Approximate Thickness**
lb./24 hr. • 1,000 ft2	(per ASTM F 2170)	ft2/gal	ft2	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 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				



Installation Guidelines

Water Vapor Emission Testing – Indoor ONLY

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^2 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 182).

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 **ALONE IS NOT ALLOWED**.
2. Steel shot blast or Hydro 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 182). Product should be at a minimum 60°F (15°C) at time of mixing. Premix Part A for 1 minute and then add Part B. Allow Part B to drain completely into Part A. Mixing is accomplished mechanically with an appropriate mix paddle. Mix for 2 minutes at about 300 rpm to a homogenous consistency. Avoid any action that may entrap air. Ensure that the material at the pail bottom and sides are agitated. DO NOT THIN.

Installation

Pour the entire pail over the area to be treated and uniformly distribute with a flat 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 182) to acrylics, Laykold Masters Bond-Kote must be used as a PU/Acrylic interface adhesion promoter.

NOTE: Laykold Epoxy VTB (Qualipur 182) must be coated within 24 hours of application, or if it becomes contaminated or dirtied (including rain), Laykold Epoxy VTB (Qualipur 182) must be lightly sanded, and solvent wiped to promote proper adhesion of Laykold Masters Bond-Kote.

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.
- Do not use curing additives.
- Do not scrape buckets. Use only what naturally flows out of the pail.
- Must be coated within 24 hours. If not coated within 24 hours, coating must be sanded with 24 grit paper and solvent wiped.
- If moisture buildup on surface, solvent wipe before sequential coating.
- Acceptable solvents for wiping: Toluene, Acetone, and Xylene

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		Clear
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.laykold.com and www.sportgroup-techhub.com.

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