# LEGGARI VAPOR BARRIER

# Technical Data Sheet

# **PRODUCT DESCRIPTION**

Leggari's Vapor Barrier is a 100% solids product designed to be applied directly over a properly prepared concrete substrate and is good for reducing Moisture Vapor Emissions of up to 25 lbs/24 hours per 1,000 square feet. It is designed to work in conjunction with our Metallic Epoxy and Flake Floors when going over concrete. When in doubt about your concrete's moisture content, Vapor Barriers are highly recommended and have become a staple of the coating industry to minimize liability.

## **ADVANTAGES**

- Meets USDA, FDA, SCAQMD, and VOC Standards
- Eligible for LEED Points: Made in California from Partially Recycled Materials
- Adhesion to Concrete, Wood, Metal, Non-glazed Tiles
- Anti-bacterial
- Easy Application
- Up to 99% RH (Relative Humidity)
- 100% Solids

# SUGGESTED USES & APPLICATION AREAS

- Seamless Moisture Mitigation
- Slurry, Mortar, and Decorative Systems

# **FINISH AND COLOR**

- Gloss, Pre-Pigmented or Clear
- Colors & Pigments: See Color Charts at Leggari.com

# COVERAGE

Coverage rates are determined by the desired outcome of the project, and install techniques. 100 square feet per gallon is recommended when trying to achieve the 25 lbs of moisture protection.

<u>1.5 gal. kit</u> covers 150 square feet. <u>3 gal. kit</u> covers 300 square feet.

# **STORAGE AND HANDLING**

Store materials in a cool, dry place out of direct sunlight. DO NOT mix materials that are warmer than 85°F. Sealed, unopened Parts A and B may be placed in an ice bath to bring the temperature of the material down. DO NOT place any aggregates or additives in ice bath. DO NOT let water into material.

- •<1 g/L VOC
- Re-coat within 24 hours
- High Traffic & Impact Resistance
- Low Maintenance
- Low Odor
- Moisture Vapor Resistance
- Waterproofing
- Applied just like Leggari Metallic Epoxy

## LIMITATIONS

• Leggari Vapor Barrier is designed only to be used with Leggari® Epoxy products.

• Adding more than the recommended amount of Part B will have an adverse effect on film properties.

## **IDEAL CONDITIONS**

Apply material when temperature is decreasing. DO NOT apply under direct sunlight. DO NOT install if rain is forecasted during time allotted for installation.

## SAFETY

Review current Safety Data Sheet(s) at leggari.com/data-sheets/ and all relevant documentation before installation. Safety conditions and personal protective equipment must be considered before using any Leggari® product.

#### SURFACE PREPARATION

Before installing any Leggari® product, substrate must be clean, profiled, and sound. For exact preparation instructions for your specific project, refer to our tutorial videos and installation guidelines.

## MIXING AND APPLICATION

#### MIXING

Mix and measure out both parts A & B at the 2:1 Ratio, but do not mix part A and B together until you are completely ready to start the project. When you are ready to begin the application, you will add the Part B to the Part A (both pre-measured) and mix with a drill and paddle for 2-3 minutes on low speed.

-Do not mix too fast or product can shoot out of mixing container and can cause burns. Once mixed, pour product into a new container–scraping out as much as possible from the edges and bottom. Then mix in the new container for another 45 seconds before pouring it out to work with.

#### WARNING

DO NOT UNDER ANY CIRCUMSTANCES LEAVE MIXED PRODUCT IN A BUCKET OR MASS. THIS WILL CAUSE A FASTER CHEMICAL REACTION AND THE EPOXY WILL HEAT UP AND BECOME TOO THICK TO USE. REFER TO THE POT LIFE AND WORKING TIME BELOW IN THE TECHNICAL DATA.

#### THINNING

We do not recommend thinning our metallic epoxy as it hasn't been exhaustively tested with thinning agents. Thin at your own risk. <u>Note</u>: thinning will affect pot life, cure time, and finished product among other things.

#### **APPLYING PRODUCT**

For best results, refer to our video tutorial and installation guidelines

#### CLEANING

Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the system. As a precautionary step, Leggari Products recommends that the end-user test their cleaning and disinfecting compounds on a sample or on a small, out of the way finished area, utilizing the intended cleaning technique prior to cleaning the entire surface area. If no deleterious effects are observed, the procedure can be continued.

-If the cleaning and disinfecting compounds or cleaning techniques damage the system, modification of the cleaning material or

**PROPERTIES OF FULLY CURED COATING** 

# CLEAN UP

You can use rags with denatured alcohol or acetone to clean any reusable tools while the product is still fluid. Anything the epoxy has cured onto may need to be thrown away or you risk having debris in your epoxy the next time you use them to mix.

#### COVERAGE

100 square feet per 1 gallon

#### DRY TIME

After Vapor Barrier is applied you will wait until the next day (24 hrs at 70°F) to apply your next coat. If you wait more than 48hrs to do so, you will need to lightly sand the surface with 220 grit sandpaper or higher and clean it before application. If another coat is not being applied you may resume light foot traffic in 48 hrs and full use in 7 days.

These time frames are based off of applications done in a controlled environment at 70°F. Temperatures can affect working time, dry time and cure time due to environmental changes, and/or other unforeseen circumstances. Please see Limitations above.

Total solids	100%
Moisture Vapor Emission Rate, lbs./1,000 sf/24 hrs (ASTM F1869)	<25
Relative Humidity (ASTM F2170)	<99%
Abrasion Resistance, mg loss, CS-17 wheel/1,000 g load/1,000 cycles (ASTM D4060)	24
Adhesion to Concrete, psi (ASTM D4541)	700
Compressive Strength, psi (ASTM D695)	10,000 - 11,200
Flame Spread/NFPA 101 (ASTM E84)	Class A
Flammability (ASTM D635)	Self-extinguishing
Flexural Strength psi (ASTM D-790)	5,100
Heat Resistance Limitation	140 - 220°F
Impact Resistance (MIL-D-24613)	Pass: No chipping, no cracking Indentation (24 h4s): 0.001
Oil Absorption (MIL-D-3134)	0%
Perm Rating, perms (ASTM E96)	0.1
Tensile Strength, psi (ASTM D638)	2,100
Water Absorption (ASTM D570)	0%

#### CHEMICAL AND STAIN RESISTANCE

1 = Best for chemical resistance: Chemical has no adverse effects on fully cured coating; remove within 24 hours.

2 = Low potential for stain: Chemical has no adverse effects on fully cured coating if removed within 24 hours.

3 = High potential for stain or degradation: Chemical must be removed within 24 hours of exposure.

NR = Not Recommended

Acetic Acid (Component of Vinegar, 10%	1
Acetic Acid, 30%	2

Acetone	NR
Ammonia, 30%	1

Ammonium Hydroxide, 30%	1
	1
Antifreeze (Coolant)	
Benzene (Component of Crude Oil)	3
Benzyl Alcohol	
Betadine, 11%	NR
Boric Acid, 4%	1
Brake Fluid, DOT 3	1
Chromic Acid, 10%	3
Chromic Acid, 30%	3
Citric Acid, 30%	1
Ethanol, 95%	NR
Ethyl Acetate, 99% (Food/Beverage Facility)	NR
Formaldehyde, 37%	3
Gasoline (premium)	1
Hydraulic Fluids (Machinery, Automobile, Aviation)	2
Hydrochloric Acid, 10%	3
Hydrochloric Acid, 30%	3
Hydrofluoric Acid, 10%	1
Hydrofluoric Acid, 30%	3
Hydrogen Peroxide, 10%	NR
Hydrogen Peroxide, 50%	NR
lodine, 2%	3
Isopropyl Alcohol	3
Jet Fuel	1
Lactic Acid, 30% (Dairy Facility	NR
Lime Juice	2
Magnesium Hydroxide	1
MEK (Methyl Ethyl Ketone)	NR
Methanol	NR
Methylene Chloride	NR
MIK (Methyl Isobutyl Ketone)	NR

Mineral Oil	1
Motor Oil, SAE 30	1
Mineral Spirits	NR
Mustard, Yellow	2
Nitric Acid, 30%	NR
Oleic Acid	1
Oxalic Acid, 10%	1
Phosphoric Acid, 20%	3
Potassium Hydroxide, 30% (Alkaline Batteries, Soap Manufacturing)	1
Propylene Glycol	1
Silver Nitrate, 20% (Photo Labs)	3
Sodium Chloride, 20%	1
Sodium Hydroxide (Caustic Soda), 50%	1
Sodium Hypochlorite (Bleach), 10%	2
Sodium Hypochlorite (Bleach), 30%	3
Sodium Persulfate (Bleaching and Oxidizing Agent)	3
Sulfuric Acid, 37% (Battery Acid)	NR
Tannic Acid, 20%	3
Tartaric Acid, 20%	1
Transmission Fluid	1
Urine (Dog and Cat)	1
Urea (Nitrogen-Rich Fertilizer)	1
Vinegar, Distilled	1
Water (Hard Water from Well)	1
Whisky	1
Wine, Cabernet Sauvignon	2
Xylene	3

\* Pigments or colorants may reduce chemical resistance or increase potential for stain. Coatings tested at ambient temperature over 1-3 days' exposure to chemical. Before completing an installation, products should be tested for chemical resistance on site.

## DISCLAIMER

PRODUCT FAILURE DUE TO IMPROPER INSTALLATION OR DEVIATION FROM THE RECOMMENDED USES &/OR APPLICATIONS WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR/INSTALLER TO COVER THE PRODUCT COST, AND LABOR.

IN THE CASE OF A PRODUCT DEFECT BEING THE REASON, A JOINT WARRANTY WOULD COME INTO EFFECT. IF THIS WERE TO TAKE PLACE LEGGARI PRODUCTS LLC WOULD REPLACE THE PRODUCTS SOLD (NOT TOOLS & EQUIPMENT) AND THE CONTRACTOR OR INSTALLER WOULD COVER THE LABOR.

Prepared by: Revision Date: LEGGARI PRODUCTS LLC JANUARY 1, 2023