Amperseal® Technical Data Sheet

Description:

Amperseal is a protective sealer for concrete and GFRC countertops. Through the use of Amperseal a countertop can be protected from chemical staining or acid etching. Clean-up of the countertop is easy and requires no cleaning solutions. It is designed to allow a property owner to maintain a protected countertop surface without staining or etching the underlying concrete.

There are several different sealing combinations available in the Amperseal System. Each sealer provides different performance and aesthetic qualities for a variety of substrates. Property owners and architects can choose from a wide range of coating combinations. These include both a completely natural appearance where the architectural finish is virtually unchanged or a color enhanced finish of the countertop. The Amperseal System is available, in Flat, Satin, or Gloss finishes.

Amperseal is a high performance permanent finish coating, which provides years of high UV, stain, chemical, etching and abrasion resistance.

Features and Advantages:

- Permanent coating
- UV & stain resistance
- Clear
- Non chalking, non-yellowing
- FDA/USDA approved
- Vapor permeable
- VOC compliant
- Various federal, state, & city testing & approvals on all types of surfaces.
- Excellent abrasion, corrosion chemical & salt spray resistance
- Flat, Satin, Gloss finishes
- 10 year limited warranty
- Workable viscosity
- Proven product system with years of successful applications

Surface Finish Applications:

- Metal
- Stucco
- Concrete
- Plastic
- Block (masonry units)
- Signs or painted surfaces
- Brick
- Murals
- Vinyl
- Wood
- Stone
- EIFS

Exceptions: glass, polyethylene, polypropylene.

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Surface Preparation

- Diamond polish to a grit of 200 or Sand to a grit of 220.
- Be sure surface is polished or sanded evenly without any shiny or inconsistent areas.
- Be sure the surface is completely clean and dry.
- Concrete surface should be at least 72 hours old; below 60 degrees you should wait longer; wait at least 24 hours after water polishing before sealing.
- Amperseal must be applied under dry conditions, with a temperature between 50ºF-90º F. The surface should be visibly dry and ambient conditions, including relative humidity, should be such that condensation does not form on the surface during application.

Step 1 – Applying the Sure Bond Primer Coat: (Only needed if applying Step 2)

**** If color enhancement is desired skip this step.**

- Wipe down the surface with a lint free rag or tack cloth. (No solvents are required or recommended)
- Using a sprayer, apply using a fog coat technique, do not wet the surface.
- A thin mist will give the best adhesion, too thick and there will be whiting or hazing on the surface. Coverage rates should be between 600-800 sq. ft. per gallon. Only one coat is necessary.
- Clean tools with MEK or acetone.
- Allow to dry for approx. 20-30 minutes before proceeding onto step 2.

Step 2 – The Base Coat: (If no color enhancement is desired)

****If Color enhancement is desired skip this step.**

- The basecoat can be sprayed, rolled, or brushed on. The best method is to roll the material taking care to get it in any pinholes.
- Wet thickness should be between 4-6 mils per coat, it is best to do a few thin coats rather than one or two thick coats, waiting just long enough between coats for the surface to dry to the touch.
- If applied too heavily the finish could become hazy. Coverage is approx. 200 to 220 sq. ft. per gallon.
- Let dry 24 hours and sand with 220 grit sandpaper and clean using a soft lint-free cloth. The surface should be free of any imperfections such as pinholes or dimples, if it is proceed to step3, if not repeat step 2. Clean tools with MEK or Acetone.

Step 3 – The Finish Coat:

- The finish sealer can be applied using an airless sprayer, a lambs-wool applicator, lint free roller, or a quality high volume low pressure (HVLP) sprayer with a tip size between 1.4 & 1.8.
- Mix the Part A portion of the finish coat thoroughly before adding Part B. This is VERY important for Flat and Satin finishes, as it makes sure to achieve full suspension of the matte agent. Then mix Part B and add to Part A stirring slowly for 4 minutes. This is the materials induction period.
- Make sure surface is completely clean and dry. Wet thickness should be between 4-6 mils.
- Two coats are recommended, allowing 45-60 minutes between coats or until first coat is dry to the touch, yet still slightly tacky, or allow first coat 24 hrs. Dry, sand with 240-320 grit sandpaper and then apply second coat. Coverage is approx. 200 to 240 sq. ft. per gallon. (Includes both coats)
- The sealer dries to the touch quickly and does not attract many dust particles, so buffing after sealing is generally not required. If buffing is desired wait 24 hours before proceeding with your post application finishing. Clean tools with MEK or Acetone.
- The sealer reaches 95% cure in 72 hours and 100% in 7 days. Until fully cured the surface must be kept clean and dry. Do not slide objects across the surface as excess scratching may occur before final cure.
- Finished, cured Amperseal surfaces should be cleaned with non-abrasive household cleaner.

Clean-Up Instructions:

Clean equipment with MEK or Acetone. Make sure to clean sprayers out as quickly as possible to avoid the Finish Coat from building up residue in the sprayer.

Handling & Storage Precautions:

Store in a cool, dry place at a temperature between 40ºF and 80ºF, out of direct sunlight. An inside detached storage area is preferable. Inside storage should be in a standard flammable liquid storage room or cabinet. Ground containers when transferring product from one metal container to another. Do not reuse empty product container for any purpose.

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Test Results

Chemical Resistance

4 Hour Covered Spot Test	(NE=No Effect)
MEK	NE
Carboxylic acid	NE
Phosphoric acid 75%	NE
Hydrochloric acid 37%	NE
Sulfuric acid 50%	NE
Nitric acid 20%	NE
IPA	NE
Toluene	NE
Acetic acid 100%	NE
Sodium hydroxide 50%	NE
Aniline	NE
Gasoline	NE
Skydrol	NE
Motor Oil	NE
Acid rain	NE
MEK double rubs	200+

Rust test (ASTM D-610-85)
Less than .03% degradation

Abrasion test (ASTM D-968)
10 liters of sand to abrade 1 mil. of dry coating

12 Hour Covered Spot Test	
Transmission fluid	NE
Gasoline	NE
Acetone	NE
Mineral spirits	NE
Xylene	NE
Motor oil	NE
Brake fluid	NE
50% Hydrochloric Acid	NE
10% Sulfuric Acid	NE
Red Wine	NE
Vinegar	NE
Ketchup	NE
Mustard	NE
Hot sauce	NE
Coffee	NE
Lemon juice	NE
Bleach	NE
Hot Tire marks	NE

Acid rain humidity:
Greater than 10 cycles. Panels were suspended in cabinet. Two liters of water placed in the bottom cabinet, which was then closed. Two liters of sulfur dioxide were introduced into the cabinet and the whole system was heated to 104º for 8 hours. The cabinet was then allowed to cool to room temperature for 16 hours. This process constitutes one cycle.

Life Expectancy:
20-25 years

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