



TECHNICAL DATA SHEET

POLYASPARTIC 745™

A revolutionary, solvent based polyaspartic coating designed to repel chemicals and abrasions available in a clear high gloss finish. The Polyaspartic 745 is a solvent based, two components aliphatic polyaspartic coating designed to coat concrete floors or concrete countertops providing incredible abrasion resistance and chemical resistance. Recommended for indoor areas with high risks of exposure to chemical spills, fuel, heavy equipment, extreme temperatures and any other potentially damaging situation the substrate may encounter. Polyaspartic 745 has an exceptionally fast dry-time, with a tack-free dry time of a 1-3 hours which makes it the best choice for projects where a thin/medium build coat is desired with a limited period of time for installation. Great for use on concrete countertops and concrete feather finish countertops where an extremely durable coating is needed.

APPLICATIONS

Exceptional when used for:

- Applications: A fast curing topcoat in garages, shop floors, warehouses or on concrete countertops
- Substrates: Concrete

Not for use on:

- For interior use only

BENEFITS

- Excellent hardness
- Excellent durability
- Fast cure time
- Stops dusting
- Protects from chemical spills
- Superior abrasion resistance
- UV Stable
- Food safe once cured
- Scratch resistant
- Excellent flexibility
- Will form an excellent bond to concrete

PREPARATION

Avoid contact with skin, eyes and clothing. Wash hands after use and do not take internally. Please refer to the product Safety Data Sheet (SDS) before using. The preparation process should be followed to ensure adequate penetration and optimum performance:

Step 1: The concrete substrate must be structurally sound, thoroughly dry and clean.

Step 2: Remove all paints, previous sealers and/or adhesives before application.



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Step 3: The substrate must be clean of oil, grease, dirt, wax, curing compounds, efflorescence and other contaminants that might interfere with the penetration of the sealer.

Step 4: For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). If acid is used to clean the concrete, neutralize the surface completely and rinse it with water prior to application. Then wait for the concrete to dry out for at least 24-48 hours.

Step 5: The surface-zone moisture content of the concrete should not exceed 4%wt. A test should be made to determine that the concrete has an appropriate vapor barrier. This can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate does not show signs of eventual hydrostatic pressure problems that may later cause disbanding.

Step 6: Cover all surrounding areas not intended to be coated.

Step 7: New concrete must be cured for at least 28 days before sealing.

MIXING

This product comes pre-packaged by weight. Kits should be mixed in their entirety. This product has a two to one mix ratio by volume- merely mix two gallons of part A with 1 gallon part B. Polyaspartic 745 A and Polyaspartic 745 B should be thoroughly mixed before combining. Scrape the bottom and sides of each container. Polyaspartic 745 A and Polyaspartic 745 B can then be combined (Polyaspartic 745 is sold as a pre-packaged kit and Polyaspartic 745 Part A should be mixed in its entirety with Polyaspartic 745 Part B). After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. Avoid whipping air into the coating. Improper mixing may result in product failure. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the properly prepared surface. This product has a short usable pot life of about 15 minutes which is substantially shorter than the actual gel time for the product. Applying the product beyond the usable pot life can result in surface irregularities.

APPLICATION

Test the sealer in an inconspicuous area to ensure the desired coverage and appearance is achieved. The mixed material can be applied by brush or roller. Workable time is about 15 minutes. Maintain temperatures within the recommended ranges during the application and curing process. It is best to maintain a wet edge to avoid roller marks. Direct sunlight or high temperatures may cause visible roller marking during application. Too thick of an application may result in product failure. Exposure to certain types of lighting such as sodium vapor lights may cause the product to discolor. Applications with relative humidity higher than 90% and/or poor air circulation may cause improper cure and surface tackiness. When the end of the pot life has been reached, you will find that the material becomes hard to apply and will actually tend to roll back up onto the roller. Do not try to continue application when the coating has reached this step. Applications made at different times with differing environmental conditions, may show slight variations in gloss. Coverage is approximately 500 sq. ft. per gallon. Make sure you test the surface for dryness prior to use and allow at least 3 hours before walking. A full cure will take up to 2 days to complete.

RECOATING/TOPCOATING



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Multiple coats of this product are acceptable. If you opt to recoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process. It is best to test the coating before recoating or topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating can commence.

Before recoating or topcoating, check the coating to insure no contaminants exist. If a blush or contaminants are present on a previous coat, remove with a standard detergent cleaner. When recoating this product with subsequent coats it is advisable to apply the recoat before 4 hours passes. Also, it is advisable to degloss the previous coat to ensure a trouble free bond.

APPLICATION NOTES:

- Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured. It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.
- Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- Colors or clarity for clear may be affected by high humidity, low temperatures, or chemical exposure.
- For best results use a high quality 3/8" nap roller.
- Slab on grade requires moisture barrier.
- Substrate temperature must be 5°F above dew point.
- All new concrete must be cured for at least 28 days.
- Colors and clarity may vary from batch to batch, therefore, use only product from the same batch for an entire job.
- Improper mixing or too thick of an application may result in product failure.
- Too thick of an application may result in surface imperfections, bubble generation or product failure.
- Always apply a test patch to determine product suitability and adhesion performance for your proposed application method and procedures.

TECHNICAL SPECS

- Feature: Durable Coating
- Chemistry: Polyaspartic Aliphatic Urethane
- Color: Clear
- Finish: High gloss
- Category: Coating
- Carrier: Solvent
- Availability: 2 component kit
- Packaging: Countertop Quart Kit, 1.5 Gallon Kit, 3 Gallon Kit
- Coverage: 500 sq. ft. per gallon
- Interior/Exterior: Interior
- Application Method: Roller
- Application Temperature: 50 F - 90 F, RH below 85%
- Number of Coats: 1
- New Concrete: Yes, at least 28 days after being poured
- Storage/Shelf Life: 1 Year
- Clean Up: Xylol



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- VOC Content: 160 g/L
- Hardness: Shore D 80
- Tensile Strength: 3800 psi
- Compressive Strength: 12,000 psi
- Ultimate Elongation: 2.5%
- Abrasion Resistance: 20mg
- Viscosity: 1000 cps
- Primer: Epoxy 325

CURE TIMES: (70F)

Pot Life – 1.5 – gallon volume: 15-20 minutes

Tack Free (dry to touch): 1-3 hours

Recoat or Topcoat: 2-4 hours

Light Foot Traffic: 3-5 hours

Full Cure (Heavy Traffic): 24-48 hours

CHEMICAL RESISTANCE

10% Sulfuric Acid: Long Term Splash Spill

10% HCl: Long Term Splash Spill

1, 1, 1, trichloroethane: Short Term Splash Spill

50% Sodium Hydroxide: Long Term Immersion

Acetic Acid 5%: Long Term Splash Spill

Ethyl Alcohol: Short Term Splash Spill

Mek: Not Recommended

Methanol: Short Term Spalsh Spill

Skydrol: Long Term Splash Spill

Xylene: Long Term Splash Spill