

LEGGARI POLYASPARTIC

Part A & B Mixed Technical Data Sheet

PRODUCT DESCRIPTION

Leggari Polyaspartic is a two-component high solids product that emits low odor during installation. It is a fast curing finish coat that is abrasion, chemical and stain resistant. We offer our polyaspartic finish coat in clear gloss and it can be pigmented if desired. It requires a primer and Concrete Sealer when it is applied to properly prepared concrete and cementitious overlays. Leggari Polyaspartic can be used in aircraft hangars, industrial kitchens, automotive showrooms and shop floors, commercial laboratories and research facilities, hospital and health care, wine and spirit processing and other facilities subjected to heavy foot traffic, fork lift traffic and chemical attack. It is VOC Compliant in all states and provinces in North America.

THE LEGGARI DIFFERENCE

All Products in our system are industrial/commercial grade and with proper installation and maintenance you will achieve a longevity comparable to the substrate/surface that you are coating.

We have completely revolutionized and streamlined the entire installation and ordering process(s) with the most comprehensive instructional videos on the market and an online system that builds your order for you based on the square footage of your application.

USES

- Aircraft Hangar and Maintenance Floors
- Automotive Show Room and Repair Floors
- Commercial Bakery and Kitchen Floors
- Hospital and Health Care Facility Floors
- Laboratory and Research Floors
- Manufacturing and Warehouse Floors
- Pharmaceutical Floors
- Clear coat over decorative systems

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act.
- Slip Resistance (ADA)
- LEED® and Green Seal® requirements.
- VOC and EPA Compliant all states and provinces in North America. Cures to an inert finish.
- Strong and Tough Floor.
- Excellent Chemical and Abrasion Resistance
- Designed for new floors and for resurfacing old floors

LIMITATIONS

- This product is best suited for applications when the temperature is between 60°F to 90°F (16°C to 32°C). Do not apply when Relative Humidity exceeds 85%.
- Higher temperatures will result in shortened working time and drying time.
- Requires primer when applied directly to concrete and cementitious overlays.

COLORS

Clear Gloss. Pigments available in standard colors by adding Leggari Metallic Pigments or Leggari Epoxy Pigments.

COVERAGE RATE PER GALLON

Clear Gloss and Pigmented Top Coat: 160 to 200 sq. ft. (14.9 to 18.9 sq. m), WFT 8 to 10 mils (0.20 to 0.25 mm)

CONCRETE

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers and other bond breakers

New Concrete:

- Place concrete per ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Floor Materials.
- Water Cement Ratio 0.4 to 0.5, and an approximate 4,000 psi (28 MPa) strength level.
- Requiring a positive side moisture barrier in direct contact with the concrete meeting ASTM E1745 Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- The moisture barrier needs to be placed per ASTM E1643 Standard Practice for Selection, Design, Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs, Class A 15 mils (0.38mm)

Existing Concrete:

- If field tests or laboratory analysis reveals inferior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, >



use Leggari WB Primer.

- Contaminants include, but are not limited to: organic hydrocarbon materials, calcium chlorides and aluminum stearates.
 - Concrete flooring slab can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
 - If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.
- Such conditions are detailed in ACI 201.2R "Guide to Durable Concrete" published by the American Concrete Institute.

Check concrete moisture

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe).

Check temperature & humidity

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PRODUCT APPLICATION

EQUIPMENT

Depending on system applied: Variable low speed drill (450 rpm) with Jiffy® type impeller mixing paddle, disposable 3" brush for cutting in, 3/8 inch nap non-shedding phenolic core roller and rubber squeegee for spreading Leggari Polyaspartic. Pour, squeegee and back-roll suggested, because Dip-n-Roll can be challenging for inexperienced installers resulting in unattractive lap lines.

SURFACE PREPARATION

Surface preparation in accordance with: ICRI Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. The pH of the concrete substrate should be at 9 or above. All bond-breaking material must be removed.

OPTIONAL ANTIMICROBIAL

The antimicrobial additive is a non-heavy metal biocide that can be added during the manufacturing process. The antimicrobial agent can be added to the top coat only for an economical application or it can be added to each step of the application, primer, body coat and top coat, which is recommended for abusive environments.

MIXING

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F (20°C to 26°C). Pre-mix the "A" and "B" component to ensure all raw material and pigments are dispersed uniformly.

APPLICATION

Pour all liquid material on to the properly prepared concrete substrate or next lift in ribbons and squeegee the material out evenly. Back-roll and cross rolling of material. Check for desired wet film thickness with a WFT Gauge. If broadcasting aggregate, such as, 60 mesh or 90 mesh, broadcast a sprinkle (not full broadcast) into the wet material. REFER TO INSTALLATION GUIDELINES FOR SPECIFIC PRODUCT

SKID-RESISTANCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3.

SHIPPING AND STORAGE

Ship and store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

SHELF LIFE

Shelf life is 1 year from the date of manufacturer, provide the containers are unopened.

CLEAN UP

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes.

TECHNICAL SUPPORT

For questions, contact a Leggari Products Representative. Additional Support Documents are available from Leggari Products including brochures, application guidelines, videos and more. Contact Leggari.com for additional resources.

HEALTH PRECAUTIONS

Inhalation of vapor or mist can cause headache, nausea irritation of nose, throat, and lungs. Prolonged or repeated skin contact can cause slight skin irritation. It's always recommended to use rubber gloves, respirator, and safety glasses when mixing or handling the product. If you are highly sensitive to smells you may notice a slight odor but our metallic epoxy is extremely low VOC.

- [Always wear the proper PPE for your application](#)



PHYSICAL PROPERTIES AT 77°F (25°F) 7 DAY CURE

VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	<73 gr./lt.
Viscosity, Mixed	450 cps
Solids Content, by Volume (Clear Gloss)	92.0%
Mix Ratio, by Volume	2:1
Minimum Application Surface Temperature	40°F
Working Time	15-20 mins
Pot Life, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass & Temperature	20 mins
Dry to Touch	6-8 hours
Light Traffic	36 hours
Vehicle Traffic	7 days
Full Chemical Resistance	7 days
Shelf Life (shipped and stored) at 40°F to 100°F (4.4°C to 38°C)	1 year
Packaging 1.5 gal, 3gal and 15 gal (5.7 lt., 11.4 lt. and 56.8 lt.)	

MECHANICAL PROPERTIES AT 77°F (25°F) 7 DAY CURE

Gloss Index, 60 Degrees Clear Gloss, ASTM D523	90 - 95
Gloss Index, 60 Degrees Pigmented, ASTM D523	80 - 90
Pencil Hardness, ASTM D3363	2H
Tensile Strength, ASTM D412	4,500 psi
Tensile Elongation, ASTM D412	40%
Hardness (Shore D), ASTM D2240	60
Abrasion Resistance, ASTM D4060, 500 cycles, Wheel No. CS17, 1000 gr. Load	0.02 gr.
Flexibility, Bend Mandrel Coating Test, ASTM D522	Pass 1/8 Inch
Microbial (fungi) Resistance, ASTM G21 (Without the Anti-Microbial Agent)	Pass #1
Wet Dynamic Coefficient of Friction, ASNI 326.3 Depends on the texture of the system selected, ranging from smooth to aggressive. Measured with BOT 3000E equipment.	>0.45 (inclines) >0.42 (level)
Moisture Vapor Emission Rate, ASTM F1869*	3 lbs.
Moisture Relative Humidity, ASTM F2170*	80% RH

* If moisture or relative humidity exceeds the limits consult a Leggari Products representative or installation guidelines.

Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is not a positive side vapor barrier or it is not functioning properly and/or concrete has contamination from oils, chemical spills, densifiers, excessive salts or other bond breakers.

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:
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LEGGARI PRODUCTS LLC
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