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Polyaspartic 90 Standard Set TECHNICAL DATA SHEET

High Solids, High Performance, UV Stable, Polyaspartic – Clear Gloss

DESCRIPTION

Polyaspartic 90 Standard Set is a two-component, short working time, abrasion, chemical, and stain-resistant polyaspartic. It is available in clear gloss. It cures to an inert, tough, impact, abrasion, and chemical resistance finish coat. It is resistant to Skydrol, betadine, and conventional hot-tire staining. Excellent adhesion to Deco-Crete epoxy flooring systems providing an added protective layer to prolong the longevity of the flooring system. Polyaspartic 90 Standard Set is used as an upgraded topcoat on Deco-Crete resinous flooring systems 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, forklift traffic and chemical attack. It can be applied directly over Deco-Crete Moisture Shield Primer.

TYPICAL 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
- Clearcoat over decorative systems

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act.
- VOC and EPA Compliant all states and provinces in North America. Cures to an inert finish.
- Strong and Tough Top Coat.
- 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.

COLORS

- Clear Gloss
- Refer to Deco-Crete Coatings and Sealers Color Chart

COVERAGE RATE PER GALLON

- Clear Gloss Top Coat: 150 to 260 sq. ft. (14.9.6 to 24.8 sq. m) WFT 6 - 10 mils (0.15 to 0.40 mm)
- Broadcast Coat: 200 to 220 sq. ft.

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)

CHECK CONCRETE MOISTURE

The concrete slab must be of 5% moisture content or lower before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe). **Refer to appropriate Technical Data**

Physical Properties at 77°F (25°C) 7 Day Cure (Unless stated otherwise)	
VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	< 150 gr./lt.
Solids Content, by Volume (Clear Gloss)	90.0% +/- 2%
Pot Life, 100 gr. Mass, Pot Life is Reduced by Increases in Mass & Temperature	15 - 20 Minutes
Mix Ratio, by Volume	2:1
Minimum Application Surface Temperature	40°F
Dry to Touch	2 - 4 Hours
Light Traffic	24 Hour
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 Years
Packaging 1 ½ gal, 3 gal, 15 gal (5.5 lt., 11.4 lt., 3.79 lt., 56.9 lt.)	

Mechanical Properties at 77°F (25°C) 7 Day Cure (Unless otherwise stated)	
Surface Preparation ICRI Guideline No. 310.2R – Concrete Surface Profile (CSP 2 and above) Depending on System to be Installed and Condition of Concrete.	
Gloss Index, 60 Degrees Clear Gloss, ASTM D523	90 - 95
Tensile Strength, ASTM D412	4000 psi
Tensile Elongation, ASTM D412	40%
Abrasion Resistance, ASTM D4060 500 cycles, Wheel No. CS17, 1000 gr. Load	0.02 gr.
Water Absorption, ASTM 570	<0.1%
Flexibility, Bend Mandrel Coating Test, ASTM D522	Pass 1/8 Inch
Impact Resistance, ASTM D2794, 160 in/lbs.	No Loss of Bond or Cracking
Microbial (fungi) Resistance, ASTM G21 (Without the Anti-Microbial Agent)	Pass #1
Wet Dynamic Coefficient of Friction, ASNI 326.3 Depends on texture of system selected, ranging from smooth or aggressive. Mea-sured 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 the Deco-Crete representative and refer to **Deco-Crete Moisture Shield.**	

Note: Although moisture 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.

CHECK TEMPERATURE & HUMIDITY
Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 5°F (3°F) or more below the surface temperature. Do not apply if humidity is at or above 85%.

SURFACE PREPARATION
Surface preparation per: 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.

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 Polyaspartic 90 Standard. Pour, squeegee, and back-roll are suggested because Dip-n-Roll can be challenging for inexperienced installers resulting in unattractive lap lines.

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 topcoat only for an economical application or it can be added to each step of the application, primer, body coat, and topcoat, 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" components to ensure all raw material and pigments are dispersed uniformly.

APPLICATION
Pour all liquid material onto the properly prepared concrete substrate or next lift in ribbons and squeegee the material out evenly. Back-roll and cross-role of the 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.

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 per federal, state, province, and local regulations.

MAINTENANCE
Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong the 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 Deco-Crete Representative. Additional Support Documents are available from Deco-Crete, including brochures, application guidelines, videos and more. Visit Deco-CreteSupply.com or contact Deco-Crete for additional resources.

DISCLAIMER
All guidelines, recommendations, statements, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assumes all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards listed herein are the only ones, which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or state-ments, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Deco-Crete makes no claim that these tests or any other tests accurately represent all environments. Not responsible for any typographical errors.

LIMITED WARRANTY
Deco-Crete warrants its products to be free of manufacturing defects and meets all Deco-Crete current published physical properties. Deco-Crete's sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Deco-Crete of any nature whatsoever expressed or implied, including any warranty of merchant-ability or fitness for a particular purpose in connection with this product. Deco-Crete shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Deco-Crete shall not be responsible for the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Deco-Crete reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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