



PolyArmor *HLD6520FR*

TECHNICAL DATA SHEET

PolyArmor HLD 6520 FR is an ASTM E-84 Class A fire rated aliphatic polyaspartic/polyurea top coat with excellent UV and color retention, designed for commercial, industrial and manufacturing atmospheres. POLYARMOR HLD 6520 FR is a 100% solids

two-component spray or roller applied for use on concrete, wood and metal surfaces. It can be rolled or sprayed in one or more passes and is insensitive to moisture.

FEATURES

- USGBC LEED, EQ Credit 4.2: Low-emitting VOC Compliant Materials
- 100% Solids, No VOCs
- E-84 Class A fire rated
- Abrasion Resistant
- UV Stable
- Excellent Color and Gloss Retention
- No Noxious Odors

RECOMMENDED USES

- Cold Storage
- Food Processing Facilities
- Commercial Facilities
- Industrial Facilities
- Manufacturing Facilities

TYPICAL PROPERTIES

MIX RATIO BY VOLUME	N/A	1A:2B
HARDNESS: SHORE D	ASTM D-2240	65
TEAR RESISTANCE, DIE C	ASTM D-412	530 PIL
TENSILE STRENGTH	ASTM D-412	3000 PSI
ELONGATION	ASTM D-412	300%
FIRE RATING	ASTM E-84	CLASS A 5/10
SOLIDS	ASTM D-2697	100%
VISCOSITY AT 75°F (24°C)	BROOKFIELD	PART A 3000 CPS PART B 1500 CPS
VOLATILE ORGANIC COMPOUNDS	ASTM D-2369-81	0 LB/GALLON, 0 GRAMS/LITER
TACK FREE TIME	(THICKNESS AND SUBSTRATE TEMP. SENSITIVE)	135 MINUTES
POT LIFE @ 75° F (24° C) @ 50% R.H	(THICKNESS AND SUBSTRATE TEMP. SENSITIVE)	20 MINUTES
RETURN TO SERVICE	FOOT TRAFFIC	4 - 8 HOURS
RETURN TO SERVICE	FULL SERVICE	24 - 48 HOURS

NOTE: PHYSICAL PROPERTIES MAY VARY ON THE TYPE OF SPRAY EQUIPMENT USED. THE END USER SHOULD CHECK THE SUITABILITY OF THIS PRODUCT PRIOR TO USE.

PRECAUTIONS: Part-A contains an Isocyanate. Before using, refer to Safety Data Sheets (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, rubber gloves and safety goggles with side shields during mixing and application. Respiratory masks should be worn at all times. Contact with skin-wash immediately with soap and water. Contact with eyes-rinse immediately with lots of water and seek medical attention. Keep away from children. **NOTICE:** Read all the information in this product information bulletin, and safety data sheet (SDS) before applying any material. The information contained herein is for the purpose of identifying the product and does not constitute a warranty or guaranty that the product will conform to this description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors. All published information and specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of The Hanson Group, LLC. User shall rely on their own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from their direct use, indirect use or consequential to their use of the product. The Hanson Group, LLC shall not be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. Products manufactured by The Hanson Group, LLC are free of defects for a period of one (1) year from time of manufacture. Liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the materials in question. PolyArmor® is a trademark registered in the US Patent and Trademark Office. The marks of The Hanson Group, LLC, its divisions, slogans, emblems, other marks appearing in this document are the trademarks and/or service marks of The Hanson Group, LLC, its subsidiaries, affiliates or licensors.



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COLOR

Clear, Grey, Tan and Black - Add color to Part-B only. Non-Standard colors available with minimum order. POLYARMOR HLD 6520 FR is UV stable.

COVERAGE RATE

Coverage rates for all products are approximate and vary based on type of substrate, substrate porosity, and roughness and size of broadcast aggregate. 1 gallon (3.79 liters) of POLYARMOR HLD 6520 FR per 100 square feet (9.29030m²) yields a theoretical 16 miles dry (406.4 microns) film thickness.

SURFACE PREPARATION

Perform an adhesion test prior to starting any coating project. If required a substrate adhesion test should be performed seven days after application. Concrete should be cured for 28 days (less than 28 days a Moisture Vapor Reducing primer maybe required) prior to product application and have at least 3000 psi compressive and 220 psi tensile strength. Surface preparation is the essential first stage treatment of a substrate before the application of any coating. The performance of a coating is significantly influenced by its ability to adhere properly to the substrate material. It is generally well established that correct surface preparation is the most important factor affecting the total success of surface treatment. The presence of even small amounts of surface contaminants, oil, grease, oxides etc. can physically impair and reduce coating adhesion to the substrate. Be sure that surfaces are clean, dry, and sound and give sufficient profile to obtain adequate product adhesion. Remove all dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter. Perform an adhesion test prior to starting any coating project. Shot Blast concrete between CSP 3 - 5. Profile steel between 4-6 mils. Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

PRIMER & CONCRETE REPAIR

Select appropriate primer. POLYARMOR primer is recommended on all substrates, except on properly prepared steel (immersion requires primer). If the concrete surface is unsuitable for coating, use a suitable primer or suitable primer with sand as a repair agent. Once the repair has cured, prime the entire surface intended for coating. Consult The Hanson Group for selecting the best primer for your substrate.

PACKAGING

3 gallon kit - 1 gallon Part-A (7.57082 liters) and 2 gallon Part-B (3.785 liters).

MIXING PROCEDURES

Adequately mix POLYARMOR HLD 6520 FR Part-A and Part-B separately before combining. Combine Part-A and Part-B and mix again with air driven power tools until the mixture and color is consistent. POLYARMOR HLD 6520 FR should be used within 20 - 30 minutes of mixing. Do not mix partial containers of multi-component materials. Do not dilute under any circumstances.

STORAGE

POLYARMOR HLD 6520 FR has a shelf life of 1 year shelf life from the date of manufacture, in factory-sealed containers. Storage temperature for Part-A and Part-B is between 65°F - 90°F (18°C - 32.22°C) at or below 50% relative humidity, avoiding freezing temperatures. If shipping or storage temperatures should fall below 65°F (18°C), some crystallization could result. Unless proper action is taken to re-form the original solution, subsequent dimerization will proceed quickly and will deteriorate the assay of the product. Never store directly on concrete surface, always store on pallets. Do not open until ready to use and keep containers sealed tightly to eliminate any condensation, moisture, or water contamination.

APPLICATION

Apply POLYARMOR HLD 6520 FR onto the horizontal surface and spread evenly over the entire surface using 1/8" notched squeegee, then back roll using a 1/4 " mohair roller with a phenolic resin core. On vertical surfaces use a 1/4 " mohair roller with a phenolic resin core. Insure that the substrate and outside air temperature is between 40° F (4.4° C) and 104° F (40° C) at least 6° (-14.44° C) above the dew point and rising. When POLYARMOR top coats are applied in sections, each application must overlap the previous one within 18 hours by a minimum four (4") to a neat straight line. Recoat window is within 18 hours of application, if not recoated within 18 hours, contact The Hanson Group. If application is over a polyurea, it must be applied within 0 - 6 hours of application of the POLYARMOR polyurea.

CURING

At 70° F (21° C) and 50% humidity, allow each coat to dry 2 - 4 hours. Allow 48 hours before permitting heavy traffic. Heavier applications will require a longer curing time.

DISPOSAL

Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.