



# PolyArmor SLD4300 HD

## TECHNICAL DATA SHEET

PolyArmor SLD 4300 HD is a two-component elastomeric spray applied aliphatic system that is color stable for use as a protective or waterproof coating. It is abrasion and impact resistant and can be used on vertical or horizontal surfaces to form a seamless membrane of a desired thickness on concrete, metal, fiberglass, and geotextile fabrics. Its quick gel and set time allow for single or multiple applications without appreciable sagging and is relatively insensitive to moisture, allowing application in most temperatures.

### FEATURES

- 0 VOC's - 100% Solids
- Color stable
- Meets the NACE 6A198 and PDA standards of a pure polyurea
- No noxious odors
- USGBC LEED, EQ Credit 4.2: Low-emitting VOC Compliant Materials
- Withstands constant water immersion

### RECOMMENDED USES

- Water features
- Slides
- Lagoons

### TECHNICAL DATA

	Units	Values	Test Method
<b>MIX RATIO BY VOLUME</b>		1A:1B	
<b>GEL TIME @ 150° F (66° C)</b>	sec	7-10 (thickness and substrate sensitive)	Sprayed
<b>TACK FREE TIME</b>	sec	15-20 (thickness and substrate sensitive)	Sprayed
<b>SHORE HARDNESS</b>	Shore D	65D	Sprayed ASTM D-2240
<b>TENSILE STRENGTH</b>	psi	2950 PSI	Sprayed ASTM D-412
<b>ELONGATION</b>	%	170%	Sprayed ASTM D-412
<b>TEAR RESISTANCE, DIE C</b>	pli	590 PLI	Sprayed ASTM D-624
<b>PERCENT SOLIDS</b>	%	100 (0 g/l VOCs)	Calculated ASTM D-2697
<b>VISCOSITY AT 72°F</b>		PART A 850 PART B 500	Calculated BROOKFIELD
<b>VOLATILE ORGANIC COMPOUNDS</b>		0 LB/GALLON, 0 GRAMS/LITER	Calculated ASTM D-2369-81

**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.



## SURFACE PREPARATION

If applied over concrete, concrete should be cured for a minimum of 28 days 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 established that correct surface preparation is the most important factor affecting the total success of surface treatment. Surfaces will be clean, dry, and sound, the presence of even small amounts of surface contaminants, dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter can physically impair and prevent coating adhesion to the substrate.

Concrete should be shot blasted to a CSP 4-6. Profile steel between 4-6 mils Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

## COLOR

Black, White, Grey, and Neutral – add color to side B only. Non-standard colors available upon request.

## COVERAGE RATE

The Hanson Group's coverage rates for all products are approximate and vary based on type of substrate, substrate porosity, and roughness.

## PACKAGING

52 gallons Part-A (Isocyanate) and 52 gallons Part- B (Resin) packaged in 55 gallons drums.

## MIXING PROCEDURES

Do not dilute under any circumstances. Adequately blend PolyArmor SLD 4300 HD (Resin) with air driven power tools until the mixture and color is consistent making sure not to encapsulate any air.

## STORAGE

Shipping and storage temperatures 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.

## APPLICATION

Select appropriate PolyArmor primer, primer is required on all Substrates, except on properly prepared steel.

Do not apply more primer to substrate than can be coated the same day.

PolyArmor SLD 4300 HD is applied using a plural component, high pressure 1:1 ratio heated, spray equipment.

For optimum results proceed with application while air and substrate temperatures are between 32° F (0° C) and 104° F (40° C) 6° (-14.44° C) above the dew point and rising.

Prior to application: Precondition both Part-A and Part-B to 75° F - 80° F (24° C - 27° C) before applying.

Fit part-A with a desiccant drying device.

## TYPICAL SPRAY MACHINE REQUIREMENTS

- Capacity minimum 20 lbs. per minute
- Static pressure 2800 – 3000psi
- Spraying pressure 2500psi
- Pressure balance 100 variances desirable
- 300 psi variance maximum
- Temperatures preheaters & hose 170°F each. Check with your local representative
- PolyArmor SLD 4300 HD should be sprayed in a smooth pattern, to establish uniform thickness and appearance. Perform a substrate adhesion test (if required) seven days after application of PolyArmor SLD 4300 HD.

## EQUIPMENT CLEAN-UP

Immediately clean equipment with an environmentally safe solvent, as permitted by local regulations. Cured or dried material may be removed by mechanical means. Know your equipment and how to perform routine maintenance.