



PolyArmor SRD5000

TECHNICAL DATA SHEET

PolyArmor SRD 5000 is a 100% solids elastomeric coating designed for optimum performance in exterior conditions. Applied by high pressure spray equipment, POLYARMOR SRD 5000 can be used as a superior protective, corrosion or waterproofing coating with outstanding overall performance in industrial applications. POLYARMOR SRD 5000 is the new beneficiary of the Heavy Duty chemistry or HD product that has been used for years throughout North America.

Formulated for the most demanding applications in commercial and industrial manufacturing applications, POLYARMOR SRD 5000 can be used in vertical and horizontal applications on concrete, wood metal surfaces and composite surfaces-new and old. The cured elastomer provides good overall chemical resistance and outstanding abrasion resistance. The quick gel and handling time is convenient for applications inside and outside. Easily sprayed to the desired thickness using conventional spray techniques. POLYARMOR SRD 5000 provides a quality selection for multiple uses.

FEATURES

- Very low temperature resistance (-40F)
- Excellent water resistance
- Outstanding Abrasion Resistance
- Complies with SCAQMD Requirements - 100% Solids
- Installation with or without reinforcement
- Can be applied on Geotextile Fabric and conventional fiber reinforcements
- Odorless
- Thermal Stability – Very Good

RECOMMENDED USES

- Beverage/Food Processing Plants
- Cold Storage Facilities
- Amusement Parks/Entertainment
- Environmental
- Planters/ Tunnels/ Underground Vaults
- Industrial/Manufacturing Facilities
- Marine
- Institutional/Medical/Pharmaceutical
- Military
- Mining/Timber
- Parking Structures
- Transportation and Vehicles
- Utilities
- Wildlife Enclosure

TECHNICAL DATA

	Units	Values	Test Method	
MIX RATIO BY VOLUME		1A:1B		
GEL TIME @ 150° F (66° C)	sec	3	Sprayed	
TACK FREE TIME	sec	5	Sprayed	
RECOAT TIME	hrs	0-6	Sprayed	
DENSITY				
PART A / PART B	cps	500-1500 / 300-900		
SHORE HARDNESS	Shore D	50	Sprayed	ASTM D-2240
TENSILE	psi	2100	Sprayed	ASTM D-412
ELONGATION	%	70	Sprayed	ASTM D-412
TEAR	pli	300	Sprayed	ASTM D-624
TABER ABRASION	mg/1000rev	35	Sprayed	ASTM D4060-95
TOUGHNESS	psi	1100	Sprayed	ASTM D-412
FOOT TRAFFIC	hrs	4	Sprayed	
FULL SERVICE	hrs	24	Sprayed	
PERCENT SOLIDS	%	100 (0 g/l VOCs)	Calculated	ASTM D-2369

**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**

HEALTH AND SAFETY PRECAUTIONS: 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 when adequate ventilation does not exist. 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. **LIMITATIONS:** The end user should check the suitability of this product prior to its application. Do not open until ready to use. The Hanson Group assumes no liability for substrate defects. High temperatures and humidity can significantly affect pot life and the cure time. Low temperatures and humidity can extend the cure time. **NOTICE:** The information and data contained herein do not constitute sales specifications. The product properties may be changed without notice. No liability, warranty or guarantee of product performance is created by this document. It is the Buyer's responsibility to determine whether Hanson products are appropriate for Buyer's use and to ensure that Buyer's workplace and disposal practices are in compliance with applicable laws and regulations. No freedom from any patents or other industrial or intellectual property rights is granted or to be inferred.



SURFACE PREPARATION

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.

Metal and composite fiber surfaces should be thoroughly cleaned and primed for optimum adhesion or light abraded by blasting to a 2-3 mil profile. Consult your representative for further information.

Concrete should be cured for a minimum of 28 days prior to product application and have at least 3000psi compressive strength. 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.

CONCRETE REPAIR

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.

COLOR

Black and Neutral – Non Standard colors and color packs are available upon request. Aromatic polyureas are known to yellow or darken in color when exposed to UV and/or sunlight.

COVERAGE RATE

1 gallon (3.79 liters) of POLYARMOR SRD 5000 will cover approximately 1600 square feet 1 mil (0.025mm) thick, and can be applied in one or more passes to achieve a desired thickness.

PACKAGING

52 gallons Part-A (Isocyanate) and 52 gallons Part-B (Resin) packaged as a “kit” in 2x55 gallon drums. 275 gallon IBC Totes are available.

MIXING PROCEDURES

Adequately blend POLYARMOR SRD 5000 Part-B (Resin) with air driven power tools until the mixture and color is consistent and uniform with no striations.

STORAGE

POLYARMOR SRD 5000 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 55°F - 95°F. (Avoid freezing temperatures). Keep containers sealed tightly to eliminate any condensation, moisture, or water contamination in Part-A or Part-B. Use a Nitrogen to flush partial containers before re-sealing.

APPLICATION

Primer is recommended on all substrates, except on properly prepared steel (immersion service requires a primer). Prior to application: Precondition both Part-A and Part-B to 75°F - 80°F (24°C - 27°C). Ensure that the substrate and outside air temperature is between 40°F and 104°F, and at least 6°F above the dew point and rising. Fit Part-A with a desiccant drying device. Apply POLYARMOR SRD 5000 using plural component, high pressure 1:1 ratio heated spray equipment.

TYPICAL SPRAY MACHINE REQUIREMENTS

- Capacity minimum 20 lbs. per minute
- Static pressure 1800 – 2500psi
- Spraying pressure 2200psi
- Pressure balance 100 variance desirable
- 300 psi variance maximum
- Temperatures preheaters & hose 155°F-165°F each. Check with your local representative
- POLYARMOR SRD 5000 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 SRD 5000.

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.