THE HANSON GROUP, LLC
GOOD PEOPLE, GREAT SCIENCE

PolyArmor *1010 PW*

TECHNICAL DATA SHEET

Polyarmor 1010 PW is Certified by Truesdale Labs as NSF/ANSI 61 for potable water, and is a two-component spray applied 100% pure aromatic polyurea coating, its flexible, abrasion, and impact resistant. Polyarmor 1010 PW forms a continuous seamless membrane of a desired thickness on concrete, metal, fiberglass and geotextile fabrics. Its quick gel and set time allows for single or multiple applications without appreciable sagging and is relatively insensitive to moisture, allowing application in most temperatures.

FEATURES

- USGBC LEED, EQ Credit 4.2: Low-emitting VOC Compliant Materials
- ANSI/NSF, UL listed
- Chemical resistant
- Meets the NACE 6A198 and PDA standard of a pure polyurea
- Meets USDA criteria
- No noxious odors
- No primer for carbon or mild steel metals
- Thermal stability – excellent
- Withstands constant water immersion

RECOMMENDED USES

- Beverage/Food Processing/Cold Storage Facilities
- Commercial/Industrial/Manufacturing
- Entertainment/Amusement Parks
- Pipe Line Coating
- Potable Water Containment

TECHNICAL DATA

MIX RATIO BY VOLUME	N/A	1A:1B
HARDNESS: SHORE D	ASTM D-2240	50
TEAR RESISTANCE, DIE C	ASTM D-624	920 PIL
TENSILE STRENGTH	ASTM D-412	3650 PSI
ELONGATION	ASTM D-412	525%
SOLIDS	ASTM D-2697	100%
VISCOSITY AT 75°F (24°C)	BROOKFIELD	PART A 800 - 1200 CPS PART B 300 – 600 CPS
VOLATILE ORGANIC COMPOUNDS	ASTM D-2369-81	0 LB/GALLON, 0 GRAMS/LITER
GEL TIME @ 150° (66° C)	(THICKNESS AND SUBSTRATE TEMP. SENSITITIVE)	4 SECONDS
TACK FREE TIME	(THICKNESS AND SUBSTRATE TEMP. SENSITITIVE)	60 SECONDS

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

PROFESSIONAL USE ONLY

Read and understand all the information contained in the Product Information Bulletin's, SDS's and product labels prior to starting any project. Nothing contained in any of THG's materials relieves the end user of the obligation to read and follow the warnings and instructions for each of THG's products.

PREPARATION

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 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. Shot Blast concrete between CSP 3 - 7. Profile steel between 4-6 mils. Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

COLOR
Black, Grey and Neutral –add color to side B only. THG's aromatic polyurea's are UV stable – but are known to darken or change color when exposed to UV and/or sunlight. This discoloration has shown to have little to no effect on the integrity of aromatic polyureas.

COVERAGE RATE
THG's coverage rates for all products are approximate and vary based on type of substrate, substrate porosity and roughness. 1 gallon (3.79 liters) of THG polyurea 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.

PRIMER
Select appropriate primer from individual Product Information Bulletin's. THG primer is required on all substrates, except on properly prepared steel.

MIXING
Do not mix partial containers of multi-component materials. Do not dilute under any circumstances. Adequately blend THG polyurea's Part B (Resin) with air driven power tools until the mixture and color is consistent making sure not to encapsulate any air.

APPLICATION
For optimum results proceed with application while air and substrate temperatures are between 32º F (0° C) and 104° F (40° C) 6º (-14.44º C) above the dew point and rising. THG polyurea's are applied using a plural component, high pressure 1:1 ratio heated, spray equipment. Prior to application: Precondition both Part-A and Part-B to 75º F - 80º F (24º C - 27º C) before applying. Fit Part-A with a desiccant drying device.

Proportioner Conditions:

- Capacity minimum 20 lbs. per minute
- Static pressure 2800 – 3000psi
- Spraying pressure 2500psi minimum
- Pressure balance 100 variance desirable
- 300 psi variance maximum
- Temperatures preheaters & hose 165ºF (73.89º C) each

THG polyurea's should be sprayed in a smooth pattern, to establish uniform thickness and appearance (crosshatch pattern). When a THG® polyurea is applied in sections, each application must overlap the previous one within 0 – 6 hours by a minimum four (4") to a neat straight line. Recoat window is within 0-6 hours of application, if not recoated within 0-6 hours, sand, prime and re-apply THG Polyureas. If a top coat is required, it must be applied within six (6) hours of application, THG coating.

SPECIFICATION AND FIELD ASSISTANCE
Contact The Hanson Group for assistance.

DISPOSAL
All spilled material, unused contents of containers, empty containers and secondary containment spills/leaks, must be cleaned up and disposed of in accordance with local, state and federal regulations.

LIMITATIONS
The end user should check the suitability of this product and the substrate prior to its application. THG assumes no liability for substrate defects. Substrates that have previously been coated are subject to absorption, which may affect the adhesion of a new coating. THG Polyurea's have a shelf life of 1 year from the date of manufacture, in factory-sealed containers. Excess moisture vapor in concrete slabs may result in the polyurea to delaminate, discolor or cause improper curing.

PRODUCT QUALITY AND STORAGE
Shipping and storage temperatures for Part-A and Part-B is between 65º F - 90º F (18º C - 32.22º 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.

TESTING
Perform an adhesion test prior to starting any coating project. Test the entire surface of the protective liner by spark testing at 100 volts per dry mil of lining thickness as per NACE Standard RPO 18B or ASTM D-1562 (steel) or ASTM D-4787 (concrete). Mark and repair. Substrate adhesion test should be performed seven days after application.

WARNING
This product contains Isocyanates.