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Titanium-High Performance Aliphatic white

Product Data Specification

TYPICAL PHYSICAL PROPERTIES

Solids (Volume)	65%
Solids (Weight)	76%
Viscosity	
ASTM D-2393	3500 cps
Free Film Elongation	
ASTM D-412	350%
Free Film Tensile Strength	
ASTM D-412	1500 psi
Weight/Gallon	9.15 lbs.
Shelf Stability	6 months
Hardness	
ASTM D-2240	Shore A 90
Flash Point CETA	
Flash Close Cup	106-110 F.
VOC	2.4 lbs/gal
Initial Reflectance	77%

DESCRIPTION

Titanium High Performance Aliphatic White is a single component, aliphatic, moisture-cure, polyurethane coating. Titanium High Performance Aliphatic White was developed to provide the highest possible combination of flexibility, elongation, gloss and color retention, as well as excellent weathering and UV screening capabilities. In combination with urethane primers and base coat it produces a continuous, seamless, waterproof coating system.

USES

Titanium High Performance Aliphatic White is designed for exterior industrial maintenance wherever weather protection or corrosion resistance are important. It is a versatile, easily applied finish coating over Titanium Base Coat and over a variety of other substrates such as polyurethane foam, concrete, and wood.

COLORS

Standard color is white.

PACKAGING

Packaging is standard in 5 gallon pails.

APPLICATION EQUIPMENT

Titanium High Performance Aliphatic White may be by brush, roller or airless spray.

Brush or Roller: Recommended for small areas or where over-spray may be a problem. Use a fine bristle brush or medium nap solvent resistant roller.

Airless Spray Equipment: Airless spray equipment should be capable of producing a material output of 1 gallon per minute at 3000 psi. 2500 - 3000 psi at the spray gun is essential to provide a good spray pattern. Titanium High Performance Aliphatic White is designated a "medium elastomeric coating" with high viscosity for pump purposes. 1/2" to 3/4" high pressure hoses perform well. The airless spray gun should be equipped with a ball-bearing swivel for ease of handling. Recommended orifice size is .025" to .035" diameter, wide-angle fan pattern. A reverse-a-clean nozzle is recommended. Exact orifice size will vary with temperature of the material and weather conditions.

APPLICATION

Titanium High Performance Aliphatic White to other elastomeric coatings: Elastomeric membranes make ideal companions for Titanium High Performance Aliphatic White. Titanium Base Coat for sprayed-in-place polyurethane foam and concrete decks is recommended. Elastomeric membranes should be coated only upon the completion of the curing cycle. Apply Titanium High Performance Aliphatic White with the recommended airless spray application equipment at the rate of 1 to 1 ½ gallons per 100 square feet.

* For best application results finish coats such as Titanium High Performance Aliphatic White should be applied in two passes. In planning application of Titanium High Performance Aliphatic White consider environment and weather related conditions such as frost, dew, mist, condensation, humidity, and temperature. Temperature should be above 35^0 F., more than 5^0 F. above the dew point and rising, for best application results.

Application of Titanium High Performance Aliphatic White with spray equipment may require some masking and possible erection of wind screens to prevent overspray and drift damage.

Titanium High Performance Aliphatic White to Polyurethane Foam Insulation: (See Polyurethane Foam System Specification - Urethanes) Titanium High Performance Aliphatic White applications to polyurethane foam must be preceded by proper substrate preparation. Titanium High Performance Aliphatic White is applied as a finish coat to Titanium Base Coat. Titanium High Performance Aliphatic White may be applied at a rate of 1 to 1 ½ gallons (in two coats) per square to the cured Titanium Base Coat. Roofing granules may be embedded into a final tack coat of 1/2 gallon of Titanium High Performance Aliphatic White.

Titanium High Performance Aliphatic White to concrete: (See Concrete Roof Specification) Titanium High Performance Aliphatic White applications to concrete must be preceded by proper substrate preparation. Previous coatings, oil, dirt and miscellaneous surface contamination must be removed to provide proper surface for adhesion. Power wash or power shotblasting may be required. Titanium Base Coat is an excellent base coat for Titanium High Performance Aliphatic White on concrete (see Prairie's Titanium Base Coat Material Data Sheet). Titanium High Performance Aliphatic White will typically require a two coat application. The first coat of 1/2-3/4 gallon per 100 square feet will require back-rolling with a short nap roller if applied by spray. A second coat of 1/2-3/4 gallon per 100 square feet should be applied within 24 hours. Roofing granules may be embedded into the final coat of Titanium High Performance Aliphatic White.

RE-COAT TIME

The re-coat time for Titanium High Performance Aliphatic White is approximately 8 hours depending upon temperature and humidity. High temperature and humidity accelerates the cure, low temperature and humidity slows the cure. If more than 48 hours elapse before re-coating, consult prairie for proper re-coating procedures.

TEMPERATURE CONSTRAINTS

Cold temperatures influence viscosity and handling characteristics of Titanium High Performance Aliphatic White. Heat increases and cold decreases the flow of Titanium High Performance Aliphatic White. When temperatures fall below 40^0 F., Titanium High Performance Aliphatic White can best be applied after storage at 70^0 F. or higher for a minimum of 48 hours prior to use. For ease of spray application, material temperature should be 65^0 F. minimum. For additional cold weather application techniques and information, consult

prairie. The substrate temperature range for application is 40°F – 120°F.

CLEAN-UP

Upon completion of the application, tools, hoses and equipment must be cleaned immediately with xylene (xylol) solvent.

LIMITATION

Titanium High Performance Aliphatic White cures by reacting with air moisture. Partially used containers should not be left open and exposed to the air. Curing in the once opened container can be slowed by placing Plastic Wrap directly over the surface of the coating and tightly resealing the container. If a cured film has formed on the top of the product it should be carefully cut away prior to mixing the remainder of the product in the container. The surface film formation does not affect the performance of the remaining product.

Titanium High Performance Aliphatic White has limited thixotropy and will tend to run if applied too heavily to inclined surfaces.

CAUTION!!!!

Titanium High Performance Aliphatic White contains aliphatic isocyanate and mineral spirits. It is combustible (FP 104^0 F.) and gives off vapors when drying. Prevent contact with skin and eyes. Prolonged contact may cause injury. Avoid inhaling vapors - may cause irritation, depression, intoxication. DO NOT take internally - may cause injury to liver, spleen, central nervous system. Use only with adequate ventilation. Keep containers closed when not in use. Keep used and unused containers away from sources of ignition. Use impervious gloves, goggles, and if used in areas of poor or inadequate ventilation, use approved organic vapor cartridge respirator. DO NOT cut or weld on or near empty container. DO NOT reuse empty container without commercial clean or recondition. FOR PROFESSIONAL USE ONLY. KEEP USED AND UNUSED CONTAINERS OUT OF THE REACH OF CHILDREN.

In case of contact, flush affected area(s) thoroughly with water 15 minutes. Remove and wash contaminated clothing. If inhalation effects occur, remove to fresh air. If breathing is difficult, give oxygen. Administer artificial respiration if not breathing. If swallowed, DO NOT induce vomiting. SEEK MEDICAL ATTENTION FOR ALL OVEREXPOSURES.
PROP 65: contains less than 0.1% silicon dioxide, which has been listed by the State of California as a substance known to cause cancer.

WARRANTY

IMPORTANT: While the information and data contained herein are presented in good faith and believed to be reliable, they do not constitute part of our terms and conditions of sale. Nothing herein shall be deemed to constitute a warranty, expressed or implied, that said information or data are correct or that the products described are merchantable or fit for a particular purpose, or that said information, data or products can be used without infringing patents of third parties.

Prairies' sole warranty is that the product will meet the sales specification at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

PRIOR TO USE OF THIS MATERIAL, READ ALL APPROPRIATE MATERIAL SAFETY DATA SHEETS.

Chemical & Solvent Resistance Data

TEST (ASTM D471): 28 Day Immersion

EXPOSURE	PERFORMANCE
Water	No Effect
Mineral Acids (10%)	Slight Swelling
Organic Acids (10%)	No Effect
Caustic Potash Solution (10%)	No Effect
Ethylene Glycol	Slight Swelling