

Product Description

Baytec 2090AL is a state-of-the-art, high performance, sprayed plural component aliphatic polyurea elastomer. Baytec 2090AL will retain color stability when exposed to the harshest UV environments. This product may be used as a stand-alone coating or for best economics can be used as a color stable topcoat over any aromatic Nitrocoat.

This unique aliphatic formula is stain resistant, withstands most severe chemicals and is easily washable for restored appearance to provide long-lasting aesthetics.

Unique Properties

Baytec 2090AL is based on aliphatic polyamines and aliphatic isocyanates that give this coating its unique color-stable, UV resistant properties. It provides a flexible, extremely tough monolithic membrane with excellent water and chemical resistance.

Baytec 2090AL is a seamless membrane that can be handled or walked on within thirty (30) seconds after spraying. Due to almost instantaneous gel time, Baytec 2090AL can be applied to any required thickness in one pass, however, for even coating coverage, multiple applications in a crisscross applications are recommended.

Baytec 2090AL standard colors are white, light grey, tan, neutral. Custom colors will be quoted upon request.

Recommended Uses

- Roofing systems
- Exposed signs & displays
- Decorative fountains & ponds
- Striping for airports, highways, and parking garages
- Water and amusement parks
- Marine tanks
- Display room floors

Environmental Consideration, Substrate Temperatures and Preparation

The material supplied is two components (Component A/Component B) used to formulate Baytec 2090AL. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components

Substrate surfaces to which Baytec 2090AL may be applied must be clean, dry, free of oil and other surface contaminants. The surface should be broken by grinding, sanding, or sand blasting. A primer may be required, subject to type and/or condition of substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures or reference the primer/substrate chart on the BayerSystems website at www.buyucsc.com by clicking materials/primers.

Baytec 2090AL can be sprayed over a broad range of ambient and substrate temperatures. Contact BayerSystems personnel for applications outside of standard ambient/substrate temperatures between 40°-100°F or for specific recommendations, pricing, and availability of spray and auxiliary equipment.

Typical Physical Properties

Dry Physical Properties

Properties	Test Method	Value
Tensile Strength:	ASTM D-412	1800 psi ± 50
Elongation:	ASTM D-412	300% ± 25%
Hardness (Shore A):	ASTM D-2240	90 ± 5
Tear Resistance (Die "C"):	ASTM D-624	400 pli ± 10

Test values may vary depending on type of equipment, equipment settings and environmental conditions.

Product Reactivity & Application

Effective Gel Time (Seconds):	8-15
Tack Free Time (Seconds):	18-22
Final Cure (Hours):	72
Flash Point:	>275°F "B" Component >230°F "A" Component
Clean-up Solvent:	NMP or MEK
Thinner:	Not Used
Appearance "B" Component:	Clear amber or pigmented liquid
Appearance "A" Component:	Clear amber liquid
Shelf Life:	Twelve(12) months in unopened containers; stored between 60-100°F

Processing Parameters & Physical Characteristics

Pre-heater Temperature:	"A" and "B" 160-170°F
Hose Temperature:	"A" and "B" 160-170°F
Pressures:	2200-2600 psi (dynamic)*
Mix Ratio/Parts:	1 to 1 by volume "A" to "B"
Viscosity at 77°F:	400-600cps "B" Component 600-800cps "A" Component
Solids by Volume at 77°F:	100%
Solids by Weight: at 77°F:	100%
Weight per gallon (approx):	8.55 lbs. "B" Component 9.2 lbs. "A" Component
Theoretical Coverage DFT @16mils (0.4mm):	100 s.f. (9.1m ² /gal)
Volatile Organic Compounds:	0 lbs./gal (0g/l)
Water and Oil Resistance:	Excellent
Service Temperature:	-60°F to +300°F

Note: Complete polymerization to achieve final strength can take up to several weeks, depending on a variety of conditions.

*Dependent upon hose length

Baytec™ 2090AL

Environmental Consideration, Substrate Temperatures and Preparation (continued)

Minimum material/container temperature for spray application is 80°F ±10°F (27°C). It is recommended that Baytec 2090AL be sprayed in a crisscross pattern to ensure uniform thickness.

Storage above 60°F is recommended to prevent separation. While infrequent separation does occur below 50°F, heating above 140°F with occasional slow stirring will restore the Baytec 2090AL to its original condition.

CAUTION: Extreme care must be taken when removing and reinstalling drum transfer pumps so as NOT to reverse the "A" and "B" components.

Solvents such as MEK (Methyl Ethyl Ketone) or NMP may be used for cleanup of liquid components with adequate provision for thorough ventilation and flammability. The use of protective gloves and hand creams is strongly urged.

Processing Equipment & General Application

The polyol "B" component must be thoroughly power mixed each day, prior to use.

Follow instructions attached to "A" and "B" containers.

Recommended Equipment and Settings:

Standard 1:1 ratio, heated, plural component equipment developing a minimum of 2200 psi dynamic pressure will adequately spray Nitrocoat 2090 AL. Contact BayerSystems for equipment and gun recommendations.

Pre-heater temperature settings: 160-170°F (71-76°C)

Hose temperature settings: 160-170°F (71-76°C) a hose thermometer inserted under the insulation near the gun should read a minimum of 145-155°F (63-68°C).

Physical properties will be enhanced when sprayed at higher pressure (2200 psi or more) (13.9 mpa), utilizing an impingement mix gun and tip.

General Safety, Toxicity, & Health Data

Material Safety Data Sheets are available on this coating material. Any individual who may come in contact with these products should read and understand the M.S.D.S. In case of emergency contact CHEMTREC EMERGENCY NUMBER at 800-424-9300.

WARNING: Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact with the liquid or spray mist. Hypersensitive persons should wear protective clothes, gloves and use protective cream on face, hands and other exposed areas.

CLEAN UP: Use NMP or MEK

CONTAMINATION: Avoid moisture contamination in containers. Containers should not be resealed if contamination is suspected, carbon dioxide created pressure can develop. Do not attempt to use contaminated material.

EYE PROTECTION: Safety glasses, goggles, or a face shield are recommended.

SKIN PROTECTION: Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

RESPIRATORY PROTECTION is MANDATORY! Respiratory protective equipment, impervious foot wear and protective clothing are required at all times during spray application. Contact BayerSystems for a copy of the Model Respiratory Protection

Program developed by API or visit the BayerSystems website at www.buyucsc.com and click materials/safety documents.

INGESTION: Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

Disclaimer

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