

Product Description

Baytec 2290 is a state-of-the-art, high-performance, sprayed plural-component polyurea elastomer. Baytec 2290 is a cost-effective solution as a protective coating over most substrates, including wood, metal and concrete. This coating's superior performance extends valuable asset life by protecting a wide-variety of surfaces from abrasion, impact, chemical attack and harsh weather conditions.

Unique Properties

Baytec 2290 is a seamless membrane that can be handled or walked on within thirty (30) seconds after spraying. Due to almost instantaneous gel time, Baytec 2290 can be built up to any thickness in one pass, however, for even coating coverage, multiple applications in a crisscross pattern is recommended.

Baytec 2290 standard colors are white, light grey, neutral, and black. Custom colors will be quoted upon request. Baytec 2290 is an aromatic coating. Aromatic coatings are not color stable. For color stable coatings ask your technical representative about aliphatic materials.

100% Solids. No solvents. No VOCs. USDA Approved.

Recommended Uses

- Steel tanks, silos, and pipes
- Concrete Tanks
- Concrete dikes, irrigation ditches, and tunnels
- Proective elastomer for sprayed-in-place urethane foam
- Encapsulant for Styrofoam and other types of floatation
- Protective coating for decorative products (props, etc.)
- Truck bed and undercarridge liner
- Waterproof membrane for below grade

Environmental Consideration, Substrate Temperatures and Preparation

The material supplied is two components (Component "A"/Component "B") used to formulate Baytec 2290. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components

Substrate surfaces to which Baytec 2290 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 BaySystems website at www.baysystemsspray.com by clicking products/primers. (continued)

Typical Physical Properties

Dry Physical Properties

Properties	Test Method	Value
Tensile Strength:	ASTM D-412	2200 psi ± 50
Elongation:	ASTM D-412	150% ± 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):	3-4
Tack Free Time (Seconds):	8-10
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):	8.3 lbs. "B" Component 9.3 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™ 2290

Environmental Consideration, Substrate Temperatures and Preparation (continued)

Baytec 2290 can be sprayed over a broad range of ambient and substrate temperatures. Contact Baysystems personnel for applications outside of standard ambient/substrate temperatures between 40°-100°F or for specific recommendations, pricing, and availability of spray auxiliary equipment. Minimum material/container temperature for spray application is 80°F ±10°F (27°C). It is recommended that Baytec 2290 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 2290 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 Baytec 2290. Contact BaySystems 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 (2000 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.

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

The data presented herein is not intended for use by nonprofessional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

All guarantees and warranties as to products supplied by Bayer MaterialScience, shall have only those guarantees and warranties expressed by the manufacturer. The buyer's sole remedy as to any material claims will be against the manufacturer of the product. The aforementioned data on this product is to be used as a guide and is subject to change without notice. The information herein is believed to be reliable, but unknown risks may be present. **NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING PATENT WARRANTIES OR WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE, ARE MADE BY Bayer MaterialScience. WITH RESPECT TO PRODUCTS OR INFORMATION SET FORTH HEREIN.** Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent. Accordingly, buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Bayer MaterialScience, and the manufacturer of all liability with respect to the materials and their use thereof.

East Office
2400 Spring Stuebner Road
Spring, TX 77389
1.800.221.3626
Tel 281.350.9000
Fax 281.288.6450

West Office
PO Box 6460
Phoenix, AZ 85005
1.800.289.8272
Tel 602.269.9711
Fax 602.269.9115

baysystemsspray.com



©2008 Bayer MaterialScience. All rights reserved.