



HIGHTECH
INDUSTRIAL COATINGS

PROTECH 1110

ALIPHATIC POLYESTER POLYURETHANE TOPCOAT

PRODUCT DATA

Coverage 1 gal/100 sq. ft
Cure Time 16 hours
Shelf life 12 months

COLOR PIGMENTS

Clear
Tan
Dolphin Grey
*Custom colors are also available.
Minimum order of 150 gallons (568 liters). See color chart for special provisions.
Contact Hightech for more information.*

PACKAGING

1 gallon kit (3.78 liter): Clear Kits

Part-A: One 1 gallon can,
net fill 0.44 gallons (1.67 liters)
Part-B: One 1 gallon can,
net fill 0.56 gallons (2.12 liters)

Pigmented Kits

Part-A: One 1 gallon can,
net fill 0.40 gallons (1.51 liters)
Part-B: One 1 gallon can,
net fill 0.60 gallons (2.27 liters)

5 gallon kit (18.9 liter): Clear Kits

Part-A: One 5 gallon pail,
net fill 2.2 gallons (8.3 liters)
Part-B: One 5 gallon pail,
net fill 2.8 gallons (10.6 liters)

Pigmented Kits

Part-A: One 5 gallon pail,
net fill 2 gallons (7.57 liters)
Part-B: One 5 gallon can,
net fill 3 gallons (11.36 liters)

LEED CREDITS

The use of this Hightech product may contribute to obtaining LEED MR Credits 1.1 & 1.2

PRODUCT DESCRIPTION

PROTECH 1110 is a two component, aliphatic polyester polyurethane for use in moderate to severe chemical environments in indoor or outdoor applications. This product does not meet VOC requirements for SCAQMD areas.

ADVANTAGES

- Color and Gloss Retention
- Chemical Resistant
- Impact Resistant
- Easy Clean-ability

APPLICATIONS

- Concrete
- Manufacturing Plants
- Pedestrian Traffic
- Warehouse Floors
- Power Generating Plants
- Storage Tanks
- Food Processing Facilities
- Petrochemical Plants
- Steel Structures & Bridges
- Aircraft Hangers
- Milling & Mining Industry
- Pulp & Paper Industry

PHYSICAL PROPERTIES

PROPERTY	PIGMENTED	REFERENCE
Coverage Rate	1 gal/100 sq. ft.	-
Dry Film Thickness per Coat	10 ± 2 mils (254 ± 50 microns)	-
Pot Life	60-75 min. at 75°F (24°C), 50% R.H.	-
Flash Point	91°F (32.7°C)	-
Total Solids by Volume	63%	ASTM D-2697
Volatile Organic Compounds	2.8 lb/gal (337 gm/liter)	ASTM D-2369-81

TECHNICAL DATA CHEMICAL RESISTANCE (ASTM-D-814)

EXCELLENT	GOOD	FAIR	POOR
Distilled Water	Unleaded	Hexanol	IPA, 99%
Skydrol	Gasoline	Acetone	Butanol
Skydrol Jet Fuel	-	MEK	-
Hydraulic Oil	-	MIBK	-
Motor Oil	-	Butyl Acetate Toluene	-
	-	Xylene	-

MIXING

PROTECH 1110 may not be diluted under any circumstance. PROTECH 1110 Part-A and Part-B should be mixed individually before combining. Add Part-B to Part-A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes) and mix frequently during application to maintain uniform color. Use care to scrape the sides of the container to ensure that no unmixed material remains.

SURFACE PREPARATION

See General Guidelines for additional surface preparation information. All surfaces must be free of oil, grease, dirt and other contaminants.

Existing Coatings: A test area should be completed before topcoating.

Surface temperature should be between 60-100°F (15.5-37.7°C). Do not apply product unless temperature is at least 5°F (3°C) above the dew point. Re-coat schedule is 8-48 hours depending on the environment.

APPLICATION

Check area of application to ensure that it conforms to the substrate requirements as stated in the general guideline section. Prime interior and exterior floors and slabs. Apply PROTECH 1110 to the substrate at a rate of 0.5 gallon/100 sq. ft. (1.9 liters/m²). Additional coats may be necessary to achieve desired results.

PROTECH 1110 is a high-performance coating and may become slippery when wet.

Airless Sprayer: Use Graco 28:1 pump or higher, Binks "Airless" spray gun with Reversa-Clean 0.017-0.019 spray tips and a solvent resistant fluid line. Adjust pump pressure to the lowest possible setting that provides proper atomization. Equipment of equal performance is acceptable.

Conventional Spray: Variations of conventional production spray equipment such as pressure pot, air assisted airless or high volume, low pressure systems as supplied by Binks, Graco, Nordson, Devilbiss or equal may be used.

Brush: Use solvent resistant mohair or natural bristle brush with feather edge.

Roller: Use solvent resistant phenolic core, short nap sheepskin or equal natural roller covers.

CURING

At 75°F (24°C) and 50% relative humidity, allow PROTECH 1110 cure a minimum of 4 hours. Cure time will vary depending on temperature and humidity. Re-coats should occur within 8-12 hours of when surface becomes tack free.

STORAGE

PROTECH 1110 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

LIMITATIONS

PROTECH should not be applied in areas where the surface will come into continual contact with water.

The uncured materials used in PROTECH 1110 are very sensitive to heat and moisture. Higher temperature and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extends the cure time and the use of accelerators may be necessary.

Requires a continuous coating application to minimize lines and/or streaking.

Material remaining after application must be tightly sealed to protect it against curing in its container.

The following conditions must not be coated with Hightech deck coating systems or products: on grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays.

WARNING

This product contains Isocyanates and Solvent. PROTECH 1110 Part-A is considered Dangerous Goods. DOT regulations classify it as: **UN 1263, PAINT, Class 3, PG III, FLAMMABLE LIQUID.**

LIMITED WARRANTY:

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Hightech representative or visit our website for current technical data and instructions.

Hightech warrants its products to be free of manufacturing defects and that they will meet Hightech current published physical properties. Hightech warrants that its products, when properly installed by a state licensed waterproofing contractor according to Hightech guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Hightech of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Hightech shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Hightech shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Hightech reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER:

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Hightech makes no claim that these tests or any other tests, accurately represent all environments

KEEP OUT OF REACH OF CHILDREN