



PROTECH 4600-ECR
Extreme Chemical Resistant

Technical Data

DESCRIPTION : Protech 4600-ECR is a heavy duty, chemical resistant monolithic floor surfacer specifically designed to obtain the optimum chemical resistance in harsh acid areas. This durable non-slip, non-skid floor surface provides a tough, wear resistant floor over concrete, steel or wood. Use Protech 4600-ECR in areas subject to temperatures up to 200 deg. F.

RECOMMENDED USES: Factories - creameries - locker plants - canneries - bottling plants - bakeries - cheese manufacturing plants - breweries - meat packing plants - pulp and paper mills - milkhouses – mangers – dry kilns.

CHEMICAL RESISTANCE:

Ethanol	95% at 75 deg. F.	Good, recommend clean up within 1 hour.
Gasoline	at 75 deg. F.	Good, recommend clean up within 1 hour.
HCl	10% at 75 deg. F.	Excellent, recommend clean up within 72 hours.
HCl	20% and 37% at 75 deg. F.	Excellent, no effect after 20 day exposure.
Lactic Acid	8.5% and 85% at 75 deg. F.	Excellent, no effect after 20 day exposure.
Nitric Acid	10% at 75 deg. F.	Excellent, recommend clean up within 8 hours.
Phosphoric	8.5% and 85% at 75 deg. F.	Excellent, recommend clean up within 8 hours.
Sodium Hydrx	10%,20%,50% at 75 deg. F.	Excellent, no effect after 20 day exposure.
Sulfuric	5% and 20% at 75 deg. F.	Excellent, no effect after 20 day exposure.

PHYSICAL CHARACTERISTICS:

Compressive strength, ASTM C-579:	8,000 - 10,000 psi
Tensile strength, ASTM C-307	1,500 - 1,750 psi
Flexural strength, ASTM D790:	3,600 - 4,000 psi
Flexural Modulus of Elasticity, ASTM D-790	2.0 x 10 ⁶ psi
Abrasion resistance ASTM D-4060, CS-17 wheel)	0.1 gm max. wt.loss
Coefficient of Expansion ASTM E-831	3.5x10 ⁵ in/in ° C

FINISH: Non-slip, non-skid

VOLUME SOLIDS: 100%

FLASH POINT: Not applicable

SUGGESTED THICKNESS: 1/4"

THEORETICAL COVERAGE: 16 sq. ft.* per batch at the recommended 1/4" thickness. *Material losses during mixing and application vary and must be taken into consideration when estimating job requirements.

COLORS: Brown, gray, red

PACKAGING: 1 unit = 3 batches

- 1 batch = 1 pint can (short filled) Part A, Activator
- 1 gallon can (short filled) Part B, Base
- 1 box Part C, Aggregate

SHIPPING WEIGHT: 1 unit = 120 lbs.

USDA APPROVAL: Yes

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for use by persons having skill and know-how, at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.

SURFACE PREPARATION: NEW CONCRETE must have a minimum of 28 days cure, and no curing agents or sealers shall be used. Remove oil, grease or other loose foreign material and contaminants. A good bonding tooth is necessary. To provide a bonding tooth, prepare the surface by sandblasting, scarifying, shot blasting or acid etching. For OLD CONCRETE, remove all powdery and weak concrete. Make sure all wax, dirt, grease and other contaminants have been removed. Once the concrete has been cleaned, one of the following methods shall be used to provide proper bonding, shot blasting, sandblasting, scarifying, scabbling or acid etching. All surfaces must be dry before application. METAL SURFACES should be cleaned by solvent degreasing followed by abrasive blasting to near white SSPC-10-70 or NACE#2 with a 4 mil minimum anchor pattern or “tooth”.

PRIMER: Parker Probond primers. Consult with the Technical Department for your particular application.

CHASING EDGES: Whenever possible, cut or “key” the edges or the areas to be repaired approximately 1/2” deep with a masonry saw. Then trowel the mixture to a smooth transition to the adjoining floor. If the feathered edge method is used, taper the edges approximately 1 to 2 inches beyond the intended overlay area. For best results, seal the edges with Probond 61-CP to insure a more positive bonding tooth to the surface being repaired.

MIXING: Empty the contents of Part A into Part B, thoroughly stir for two(2) minutes. Then empty mixture into mixer pail or mortar box, draining the can for about 1/2 minute. Start the mixer and slowly add Part C. Mix for about five(5) minutes.

POT LIFE: The working life of this mixture is 25-30 minutes at 70 deg. F. and 50% R.H. Always pour the mixed batches as soon as they are blended.

APPLICATION TEMPERATURE: Material temperature should be 70 deg. F. to 85 deg. F. for approximately 48 hours before application. Do not apply when surface temperature is below 40 deg. F.

CURE TIME: Maximum chemical resistance 7 days at 70 deg. F. and 50% R.H.

APPLICATION: Pour the entire batch onto the floor in a ribbon, approximately 10 inches wide. Spread with a clean trowel, applying pressure to force the mortar into the floor’s surface. Finish each batch as you go. If the time lapse between each batch is too long, the trowel may become sticky, causing the mortar to pull and create a porous surface. Keep the trowel clean by wiping with a cloth saturated P34T Thinner. Do not spill this liquid on the floor surface or the unfinished sections.

SEALING: When the ultimate in chemical and abrasion resistance is necessary, or an easy to clean sanitary surface is a must, Protech 4600-ECR can be sealed with a clear or pigmented Protech 4400-SLS. As soon the surface is cured enough to walk on, use a clean roller and apply a liberal coat of the sealer.

CLEAN UP: Protech 4600-ECR cured or hardened will stick to practically anything, and is almost impossible to remove. Clean your tools immediately with P34T Thinner or hot soapy water.

CAUTION: It is recommended that the personnel observe good personal hygiene. Certain personnel may be sensitive to various types of resins, which may cause dermatitis. Do not use in confined space or closed area without adequate ventilation. This product may be irritating to eyes and skin. Avoid contact with liquid components A and B and keep mortar from touching tool handles and clothes. Use coveralls, goggles, rubber gloves or protective cream. Always wash thoroughly with soap and warm water after use. Should accidental eye contact occur, wash thoroughly with water and consult a physician immediately. U.S. Department of Labor approved material data sheet is available.

LIMITED WARRANTY: The Manufacturer warrants this product to be free from defects in material and workmanship under normal use and service for a period of one year of the date of purchase. The Manufacturer’s sole liability shall be limited to replacing this product if, within one year of the date of purchase, it is shown to be defective. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS OF PURPOSE. THE MANUFACTURER SHALL NOT BE LIABLE FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES OF ANY KIND. This warranty shall not be extended, altered or varied except by a written instrument signed by the Manufacturer.