

Technical Bulletin # 403A

## Product Description

A pigmented, 100% solids, high build epoxy primer for use under any of the IMPAX high performance coatings.

- Low viscosity for enhanced penetration and adhesion
- For use as a primer on mechanically prepared substrates (i.e. shot-blast)
- Low odor, easily applied with a squeegee and backroll
- Quick cure allows for fast recoat
- Can be used as part of a broadcast anti-slip system

## Surface Preparation

**New Concrete:** All surfaces must be firm, free of any laitance or efflorescence, clean, free of any adverse moisture conditions, have an appropriate surface profile, and be well cured before coating. Newly poured concrete must age at least 30 days at temperatures over 70°F before coating. Form release agents, sealers, curing compounds, salts, hardeners and other foreign matter will interfere with adhesion and must be removed. Shot-blasting, mechanical scarification, suitable chemical means, or sandblasting should be employed to prepare substrate.

**Old Concrete:** Coating older, uncoated concrete floors is done in much the same manner as new concrete. Before preparation, the concrete surface must be thoroughly cleaned with a strong detergent cleaner to remove all grease, oils, etc. All loose concrete must be removed. Holes and cracks should be filled with IMPAX Crack Fillers before application of a coating. If surface deterioration presents an unacceptably rough floor, IMPAX 5020 Floor Resurfacer is recommended to patch and resurface damaged concrete.

**Wood:** A clean, sound wood surface is required. Remove any oils and dirt from the surface, using degreasing solvent or strong detergent. Follow with sanding to remove loose or deteriorated surface wood and to obtain the proper surface profile. Consult ITW Resin Technologies Technical Department for specific recommendations.

(For more detailed information, see Bulletin #400B)

## Recommended Systems

See IMPAX Product Selection Guide for more information.

One coat of IMPAX 33-100% Solids Gray Epoxy Primer is recommended over properly prepared concrete/masonry or wood substrates. It can be top coated with most IMPAX products. Consult ITW Resin Technologies Technical Department for details.

## Mixing and Application Instructions

Before mixing IMPAX 33-100% Solids Gray Epoxy Primer, it is important that the surface be completely prepared and that all tools and equipment are handy. To mix 1 gallon units: Use electric or air mixer (approximately 250 rpm) with metal mixing blade (Jiffy Model HS or equal). Pour hardener contents into slack-filled resin can and mix for 2 to 3 minutes until material is thoroughly blended. To mix 5 gallon units: Use same procedure as 1 gallon units except a larger blade (Jiffy Model ES or equal) is required. It is strongly recommended that only full units be used, that both components are thoroughly mixed, and that all material from the bottom and sides of the container is mixed. We do not recommend using partial kits. Do not scrape or drain mixing containers. Do not reduce this material.

Immediately pour a substantial portion of mixture onto the floor and spread material, using a flat, rubber squeegee with sufficient pressure to work the primer into the porous surface. Immediately backroll the material with a quality 3/8" nap roller leaving 7 to 9 mils on the surface.

The primer can be top coated in 6 hours at 72°F (22°C). The primer must be tack free before a top coat. If pinholes or porosities are evident after initial cure of the primer, repriming may be necessary – especially on very porous concrete.

**ITW POLYMER TECHNOLOGIES**

130 Commerce Drive • Montgomeryville, PA 18936 • 215-855-8450 • Fax 215-855-4688

[www.itwresintech.com](http://www.itwresintech.com)



ITW Polymer Technologies  
Registered to ISO 9001:2008  
File No. A3798



ITW Performance Polymers Europe  
ISO 9001:2008  
Q 06428

PRECAUTION: Maintain good ventilation and avoid breathing vapors. Avoid prolonged and repeated skin contact. Wear safety glasses and impervious gloves.

## Technical Information

COLOR: Light Gray  
 GLOSS: Satin Sheen  
 VOLUME SOLIDS: 100%  
 VOC: 0 lbs./gal. (0 gr/ltr)  
 (Based on mixed components)  
 COVERAGE: 200 sq. ft./gal. @7 to 9 mils DFT/WFT  
 (4.9 m<sup>2</sup>/liter @ 200 microns WFT/DFT)  
 PACKAGING: 1 gal. unit containing 1 gal. can (slack-filled) resin,  
 1 1/2 gal. can (slack filled)hardener  
 (3.7 liters unit volume), 5 gal. unit containing 5 gal.  
 can (slack-filled) resin, 1 1/2 gal. plastic jug  
 hardener (18 liters unit volume)  
 APPLICATION TEMPERATURES: 55°F minimum to 95°F maximum  
 (12°C minimum to 35°C maximum)  
 \*Must be 5°F above dew point  
 RELATIVE HUMIDITY: 85% maximum  
 SERVICEABILITY: Recoat - 6 hours min. @ 72°F (22°C) @ 50% RH  
 24 hours minimum @ 72°F (22°C) @ 50% RH  
 MIXING RATIO: 2.85 to 1 parts epoxy resin/hardener by volume  
 INDUCTION: None  
 POT LIFE: 30 minutes @ 72°F (22°C)  
 FLASH POINT: 200°+F (93°C)  
 VISCOSITY: 2200 cps @ 72°F (22°C)  
 CLEAN UP: IMPAX IXT 59 Solvent  
 SERVICE TEMPERATURE: 180°F (82°C) Dry Heat Resistance  
 SHELF LIFE: 18 months in closed container stored  
 @ 50° to 90°F (10° to 32°C)

Date

07/2006

**General:** Every reasonable effort is made to insure the technical information and recommendations on these data pages are true and accurate to the best of our knowledge at the date of issuance. However, this information is subject to change without notice. Prior versions of this publication are invalid with the release of this version. Products and information are intended for use by qualified applicators that have the required background, technical knowledge, and equipment to perform said tasks in a satisfactory manner. Consult your local distributor for product availability, additional product information, and technical support.  
**Warranty:** ITW Polymer Technologies, a division of Illinois Tool Works Inc., warrants that its products meet their printed specifications. This is the sole warranty. This warranty expires one year after product shipment.  
**Warranty Claims:** If any product fails to meet the above, ITW Polymer Technologies will, at its option, either replace the product or refund the purchase price. ITW Polymer Technologies will have no other liability for breach of warranty, negligence, or otherwise. All warranty claims must be made in writing within one year of the date of shipment. No other claims will be considered.  
**Disclaimer:** ITW Polymer Technologies makes no other warranty, expressed or implied, and specifically disclaims any warranty of merchantability or fitness for a particular purpose.

Suggestions concerning the use of products are not warranties. The purchaser assumes the responsibility for determining suitability of products and appropriate use. ITW Polymer Technologies' sole liability, for breach of warranty, negligence or otherwise, shall be the replacement of product or refund of the purchase price, at ITW Polymer Technologies' election. Under no circumstances shall ITW Polymer Technologies be liable for any indirect, incidental or consequential damages.  
**Modification of Warranty:** No distributor or sales representative has the authority to change the above provisions. No change in the above provisions will be valid unless in writing and signed by an officer or the Technical Director of ITW Polymer Technologies. No term of any purchase order shall serve to modify any provision of this document.  
**Mediation and Arbitration:** If any dispute arises relating to products or product warranties, either the purchaser or ITW Polymer Technologies may a) initiate mediation under the then current Center for Public Resources (CPR) Model Procedure for Mediation of Business Disputes, or b) initiate a non-binding arbitration under the rules of the American Arbitration Association for the resolution of commercial disputes.