

Technical Bulletin # 405B

**Product Description**

A thin film, two-component, clear water based epoxy primer/sealer designed for use with most high performance floor coatings.

- Low viscosity for maximum penetration
- Effective barrier coat over many existing finishes\*
- Easy to use brush, roll or spray application
- Convenient recoat properties
- Excellent for use over acid-etched concrete

\*test patch must be performed

**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. Form release agents, hardeners, etc., must be removed, using same procedure as for new concrete. Holes and cracks should be filled with IMPAX Crack Filler 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.

**Previously Painted Surfaces:** If the paint is peeling or degrading in any way, it should be completely removed by sanding, blasting or stripping. If previous paint coating is completely intact, the surface may be cleaned with a strong detergent or solvent and scuff sanded to remove the gloss. A spot test should be made by applying a small amount of coating over old paint. The old finish may wrinkle or lift within 60 minutes. If it does not, wait 5 days and test for adhesion and compatibility. Do this by cutting an "X" into the coating, place tape firmly over the cut, then strip with a hard, fast pull. If the old finish fails, it must be removed.

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

**Recommended Systems**

One coat of IMPAX Water Based Clear Epoxy Primer is recommended over properly prepared concrete, masonry, previously coated, or wood substrates. It can be top-coated with most IMPAX products. Consult ITW Resin Technologies' Technical Department for details.

**IMPORTANT:** When coating previously painted surfaces, always apply test patch and examine for lifting and proper inter-coat adhesion. If lifting occurs, remove old coating or apply an appropriate barrier coat.

**Mixing and Application Instructions**

Before mixing IMPAX Water Based Clear Epoxy Primer, it is important that the surface be completely prepared and that all tools and equipment are handy. To mix 2 gallon units: Use electric or air mixer (approximately 250 rpm) with metal mixing blade (Jiffy Model HS or equal). After premixing both components, pour contents into an appropriate size mixing container and mix for 2 to 3 minutes until material is thoroughly blended. To mix 10 gallon units: Use same procedure as 2 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.

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Registered to ISO 9001:2000  
File No. 4759



ITW Performance Polymers Europe  
ISO 9001:2000  
Q 46428

Apply material using a high quality 3/8"-1/2" roller cover, being careful to work into the surface.

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

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

## Technical Information

COLOR:	Clear
GLOSS:	Gloss
VOLUME SOLIDS:	39%
VOC:	0.25 lb./gal. (30 gr/ltr) (Based on Mixed Components)
COVERAGE:	250 sq. ft./gal. @ 5-7 mils WFT/2-3 mils DFT (23.2 m <sup>2</sup> /gal. @ 125-175 microns WFT/50 microns DFT)
PACKAGING:	2 gal. unit containing 1 gal. can resin, 1 gal. can hardener (7.4 liters unit volume), 10 gal. unit containing 5 gal. can resin, 5 gal. can hardener (37 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 (below 80% for best results)
SERVICEABILITY:	Recoat - 6 hours min. @ 72°F (22°C) @ 50% RH 48 hours max. @ 72°F (22°C) @ 50% RH
MIXING RATIO:	1 to 1 parts epoxy resin/hardener by volume
INDUCTION:	None
POT LIFE:	90 minutes @ 72°F (22°C)
FLASH POINT:	200°F (93°C)
VISCOSITY:	850 to 1,000 cps
CLEAN UP:	IMPAX IXT 59 Solvent
SERVICE TEMPERATURE:	-10°F to 180°F (-23°C to 82°C) Dry Heat Resistance
SHELF LIFE:	1 year in closed container stored @ 50° to 90°F (10° to 32°C)

Date

07/2006

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