

## Chemical resistant novolac epoxy

Technical Bulletin # 438C

**Product Description**

A heavy duty, interior, two-component novolac epoxy coating formulated for demanding industrial requirements. It dries rapidly to a tough, semi-gloss finish with excellent resistance to alkali, abrasion, corrosion and chemical attack.

- Attractive semi gloss finish
- Excellent resistance to chemical attack
- Anti-slip finish available
- Easily applied by brush, roll, or spray

**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.

**Steel:** All surfaces must be dry, clean and free of all previous coatings, rust and surface contamination. Minimum surface preparation is abrasive blast to Commercial Grade SP-6. Blasted surfaces must be coated within 8 hours. Prior to blast cleaning, remove all deposits of oil or grease using Solvent Clean method SP-1.

**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 or an appropriate barrier coat should be considered.

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

**Recommended Systems**

See IMPAX Product Selection Guide for more details.

**Concrete/Wood:** 1st coat: IMPAX 2001 CRE or other compatible IMPAX Primer  
2nd coat: IMPAX 2001 CRE (with anti-slip aggregate if required)

**Steel:** 1st coat: Use appropriate rust inhibitive epoxy primer.  
2nd coat: IMPAX 2001 CRE (with anti-slip if required)

**Painted Surfaces in Sound Condition:** 1-2 coats: IMPAX 2001 CRE

**Mixing and Application Instructions**

Premix both components before combining. Pour 1 part resin and 1 part hardener into a container and power mix for 2-3 minutes at 250 rpm to insure that all pigment is completely dispersed. Anti-slip additive is mixed into the final coat just prior to application. Application over rough surfaces will reduce coverage. IMPAX 2001 coating is easily sprayed, brushed or rolled. A 3/4" pile roller is recommended for the final coat when using an anti-slip aggregate otherwise, a high quality 3/8" nap roller cover is recommended. Consult ITW Resin Technologies Technical department for spraying recommendations. Material cannot be sprayed if anti-slip aggregate is used. 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. Clean all equipment with IMPAX IXT 59 Solvent.

**IMPORTANT:** Additive of anti-slip aggregate produces only a light non-slip texture. Product should not be used in place of a non-skid finish when safety is a concern.

**PRECAUTION:** Flammable - Keep away from heat and open flame. Maintain good ventilation and avoid breathing vapors. Avoid prolonged or repeated skin contact.

**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 9001:2000  
File No. A3798ITW Performance Polymers Europe  
ISO 9001:2000  
Q 06420

**Technical Information**

COLOR: Haze Gray, Deck Gray, Sandstone, Tile Red, Safety Yellow

GLOSS: Semi Gloss

VOLUME SOLIDS: 64%

VOC: <2.8 lbs./gal. (<340g/l) (based on mixed components). Check local VOC regulations before applying.

COVERAGE: 200 ft<sup>2</sup>/gal @ 8 mils WFT 5 mils DFT (4.88 m<sup>2</sup>/L @ 178 microns WFT 127 microns DFT)

PACKAGING: 2-gal. unit containing 1 gal. can epoxy resin  
1 gal. can hardener  
10-gal unit containing 5-gal pail epoxy resin & 5-gal pail hardener

APPLICATION TEMPERATURES: 55°F minimum to 100°F maximum  
\*Must be 5°F above dew point

RELATIVE HUMIDITY: 85% maximum

SERVICEABILITY: Recoat - 8 hrs. minimum @ 72°F @ 50% RH  
Foot traffic: 24 hrs. @ 72°F @ 50% RH  
Full Service: 72 hrs. @ 72°F @ 50% RH  
Full Cure: 5 - 7 days @ 72°F @ 50% RH

MIXING RATIO: 1:1 equal parts epoxy resin/hardener

INDUCTION: None

POT LIFE: 6 hrs. @ 72°F

FLASH POINT: 80°F TCC

VISCOSITY: 1000 cps

CLEAN UP: IMPAX IXT 59 Solvent

SERVICE TEMPERATURE: 200°F Dry Heat Resistance

SHELF LIFE: 12 months in closed container stored at 50° to 90°F (10° to 32°C)

**Date**

07/2006

<p><b>General:</b> 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.</p> <p><b>Warranty:</b> 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.</p> <p><b>Warranty Claims:</b> 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.</p> <p><b>Disclaimer:</b> ITW Polymer Technologies makes no other warranty, expressed or implied, and specifically disclaims any warranty of merchantability or fitness for a particular purpose.</p>	<p>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.</p> <p><b>Modification of Warranty:</b> 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.</p> <p><b>Mediation and Arbitration:</b> 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.</p>
--	---