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MT-600 IPI-Fluid Ceramic™

A zero-VOC, two-component, RT-cure, brushable, IPN-based, advanced polymer coating for protection of interiors of pumps, valves, pipes, tanks, and other turbulent fluid flow equipment against erosion, corrosion, cavitation, impingement, and chemical attack.

- **Surface Preparation:** **Metal surfaces** must be properly prepared to comply with the standards as set by the Steel Structures Painting Council (S.S.P.C.) or National Association of Corrosion Engineers (N.A.C.E.). All loose dirt, rust, unsound material and old paint shall be removed via abrasive blasting to expose white or near-white metal. The final metal surfaces shall be clean, rust free, dry, rough and sound.

Contents of the kit	Base	Solidifier	Kit (When Base & Solidifier are mixed)
MT-600 IPI- Fluid Ceramic™	Light Purple, thick liquid in a plastic tub, 420g (Ref: 309101)	Black thinner liquid in a plastic tub; 80g (Ref: 309102)	Purple brushable liquid coating (rock-hard after proper cure)

- **Premix Base component:** Make sure the product is not exposed during storage to temperature extremes and that there is no separation of ingredients. If in doubt, warm and premix the Base component to re-incorporate any settlement back into a uniform consistency liquid. Solidifier component may not need premixing as it contains little ceramic fillers. If there is hardening of and/or sedimentation in Base, due to freezing or other reasons, use heat (20-30 minutes at 130-140°F) to re-liquefy it before pre-mixing.
- **Mixing & Application:** Pour Base and Solidifier into a clean container and mix for a minute or two with a power tool (such as ½" drill fitted with a small paint mixing paddle or equal) until a uniform color is achieved. Transfer this mix, scraping the walls and bottom of the container well, into a clean suitable container and power mix for another minute. This **double mixing** ensures perfect blending of the components, especially incorporating into the mix the material stuck on the walls and bottom of containers. Spread this mix using stiff brush, spatulas, or similar tools at 12-16 mils film wet thickness onto the properly prepared surfaces.
- **Recoat:** After a 2-3 hour cure at 65-85°F, apply a second coat, also at 12-16 mils wet-on-sticky, to cover any pinholes, fish-eye bubble, missed spots, and similar defects that may form after application of the first coat.
- **Cure:** Allow the two-coat system to cure for at least 1 day for dry service or 5-days for wet service. Cure properties at 75°F; Potlife: 60 min; Recoat: 2-3h; Initial Cure: 16h; Dry Service: 24h; Wet service: 5 days. If in doubt, allow more time for cure for good measure. For more information, please contact IPI.
- **Heat cure:** Alternatively, heat cures may be used if long downtimes cannot be afforded: 3h @ ambient followed by 6h @ 140°F (such a high temperature can be maintained around applications by erecting make shift tents and properly placing hot air blowers in them. Caution: Do not cause fires during heat cures!)

- **Coverage:** Depends on the application tools used: One properly mixed 500g-kit will cover about 8sf @ 16 mils or 10.7sf @ 12 mils. Coverage can be more realistically calculated after coating a sample area which is representative of the entire surface. Always allow some extra kits to account for waste and/or errors.

Features	Benefits
Excellent Chemical Resistance	Will withstand chemical attack and corrosion
Abrasion Resistant	Resists turbulent fluid flow with suspended solids in it
Designed for toughest fluid flow problems	Such as cavitation, impingement, implosion,
Advanced non-rusting formula	Resistant to corrosion
Highest Rockwell hardness in the industry	R 123, M 88
Elevated temperature service	400°F dry; 200°F wet
Phenomenal bond strength to steel	1 ton per square inch
Negligibly small cure shrinkage	2 mils per inch (build up thicker then grind down if needed)
High modulus: 370,000 psi	Resistance to deformation under sustained loads; no creep.
Suitable coefficient of thermal expansion	1.9 x 10 ⁻⁵ in/in °F; thermal cycling will not cause delamination
High heat distortion temp: 135°F @ RT or 208°F @ high-temp cure	Will retain its mechanical properties at elevated temperature service
Zero VOC	No flammability; no fire or explosion risks; no health concerns due to VOCs; no solvent problems (bubbles, pinholes, etc.)
Factory proportion packaging	Easy to use: No weighing or proportioning in the field
Excellent success history	Since 1985

Caution: Do not apply if the ambient temperature is expected to drop at or below 55F during mixing, application or curing. Once properly cured, the material can take lower temperature service. Do not use IPI-Fluid Ceramic™ beyond its shelf life. None of the components can be used by itself; they must be mixed together prior to application. Due to reactive nature of the product, there may be batch-to-batch and even within the same batch slight color variations. All formulations and prices are subject to change without notice. These materials are for trained, qualified technical people, not for general public. Do not cause fires during heat cures. Wear gloves, goggles, aprons, and hardhats for personal protection during installations. For safety reasons, always pay attention to what is happening around you: moving forklifts or cranes, ongoing welding or sandblasting, erecting beams, etc., and stop your work using IPI-Fluid Ceramic™ until other trades finish their tasks. Safety first! Keep away from the children!

Warranty Disclaimer: There is no warranty, expressed or implied, as to the fitness of any product for any particular purpose; nor as to anything else unless contained on the face hereof. We give no warranty, express or implied, as to merchantability, fitness for purposes sold, description, quality, productiveness, or any other matter, of any product sent out and will be in no way responsible for the outcome of the application of the product. Seller does not warrant any of the product specified herein to meet the requirements of any code of any state, municipality or other jurisdiction. Purchaser hereby waives the right of refusal and return of the goods that is usually connected with the non-warranty. There are no warranties that extend beyond the description on the face hereof. Seller disclaims any implied warranty of merchantability and buyer agrees that the goods are sold "as is." Since the quality of substrates, application, cure, and service conditions are beyond IPI's control, IPI can accept no liability for the results obtained. IPI's liability shall be limited to replacing a defective product with a good one, if IPI establishes that its product is defective. No other warranties, express or implied, are given.