

## Non-Slip Floor And Deck Coating

Technical Bulletin # 2005A

### Product Description

**AS-250** is a general purpose, vehicular grade, non-slip deck coating designed for application in slippery areas to make them safer for operations of foot and rolling equipment traffic. **AS-250** was originally developed for application on flight decks of aircraft carriers to provide the greatest possible resistance to wear and tenaciously adhere to decks so as not to fracture or disintegrate under the impact of high speed aircraft landings.

**AS-250** resists most acids, alkalis, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels, and hydraulic fluids. Refer to American Safety Technologies Chemical Resistance Table for detailed performance data.

### Surface Preparation

**CONCRETE:** Remove oil, grease, dirt, wax, etc..., by dissolving with a commercial grade cleaner/degreaser then flush the area thoroughly with clean water and allow it to dry. Remove all paint films, laitance, and loose concrete by scarification or shot blasting. Patch any holes or significant defects with PolySpec<sup>®</sup> RezRok 105 Patching Compound. Smooth or glazed surfaces should be roughened and new concrete should cure at least 30 days with good ventilation prior to application. Form release agents, hardeners, sealer, etc... will interfere with adhesion and must be removed. Prime the surface with PS-100 WB Water-based Primer.

**METAL:** All surfaces must be clean, dry and free of surface contamination. Remove all deposits of oil and grease using Solvent Cleaning method SP-1. All previous coating, rust and mill scale should be removed and the surface abraded to a Commercial Grade SP-6. Blasted surfaces should be primed immediately with MS-7CZ Industrial Primer.

**WOOD/FIBERGLASS:** A clean sound surface is required. Remove any dirt or oils from the surfaces with a commercial cleaner/degreaser and allow the surface to dry. Follow with sanding to remove loose or deteriorated surface and to obtain the proper surface profile. For wood prime the surface with PS-100 WB Water-based Primer. For fiberglass use the MS-7CZ Industrial Primer for the best adhesion.

### Application Techniques

**AS-250** is designed to be applied over a primer or sealer.

1. Thoroughly pre-mix base component with a mechanical mixer such as a pneumatic drill motor with a Jiffy<sup>®</sup> mixing blade making sure all settlement is lifted off the bottom of the container and is uniformly dispersed and assumes a uniform color and appearance.
2. Pour entire contents of hardener can into base material. Mix hardener and base material with a Jiffy<sup>®</sup> mixing blade for approximately 3-5 minutes scraping bottom and side of the can until mixed material assumes a uniform color and appearance. No induction time is required.
3. **AS-250** should be applied at surface temperatures between 50°F and 130°F and applications outside that range are not recommended.
4. Exterior applications must be protected from rain for at least 12 to 24 hours after application according to humidity. Protect from heavy or extended exposure to water, oil and chemicals for 5 to 7 days.

**ROLLER:** Rolled applications provide the most aggressive non-slip characteristics with an irregular, ridged profile.

1. Using a phenolic roller it is important that the rolled profile expose the maximum amount of non-slip aggregate. If aggregate is not properly exposed the coating may become slippery when wet.
2. Pour a "ribbon" of **AS-250** on the surface approximately 2' long and 6" wide. Roll material in one direction only, in slow straight strokes pulling material toward you with a moderate amount of pressure. Do not over-roll too many times or press down too heavily. Be careful that material does not build up too thickly along welds (roll across welds, not with them). Material applied too thickly may not properly cure.

ITW POLYMERS COATINGS North America

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

**TROWEL:** Trowel applications provide excellent non-slip characteristics with a rough, textured surface.

1. Use a flexible bladed plasterer's finishing trowel approximately 4 inches by 12 inches. Use smooth edges, not notched.
2. Pour a ribbon of **AS-250** on the surface approximately 2' long and 6" wide.
3. Hold trowel at 45° angle to surface and spread with sweeping motion. Reverse angle of trowel for opposite stroke. Pull material toward you. Trowel across welds to avoid too thick an application.

**SPRAY:** Sprayed applications will result in a uniform appearance with good non-slip characteristics.

1. AS-250 should not be thinned. Thinning could result in grit not remaining properly in suspension.
2. Specialized mastic type spray equipment is required. A recommended set-up is as follows:
  - a. A 5-gallon bottom outlet pressure tank equipped with a double regulator and an air driven agitator, and 1" I.D. outlet pipe.
  - b. 25 feet of 3/8" air hose with 3/8" female connectors at each end.
  - c. 25 feet of 3/4" material hose with 3/4" female connectors at each end.
  - d. A Binks® Model 7E2 spray gun equipped with 1/4" (#45) fluid nozzle and a 1/4" internal air cap or a Binks® Model 52-2012 (4 foot) pole gun equipped with the same fluid nozzle and air nozzle.
3. Minimum air supply required is 20 CFM at 90 lbs. pressure. Recommended pressure is 15-20 psi on material and 20-25 psi on atomization. Always keep atomization air pressure higher than pot pressure with constant agitation. Good coverage and film thickness will be obtained working at 18" - 24" from surface. Overlap strokes about 50%. Make sure of wet application. Very little abrasive rebound will be noticed at 15 psi; however, it will be more noticeable at higher pressures.
4. When temperature is above 80°F, it is advisable to flush the spray equipment with epoxy solvents every hour or so in order to prevent the possibility of any material setting up and plugging the equipment.

## Surface Maintenance

Maintain a clean surface to ensure the anti-slip performance of the **AS-250** is maximized. The following cleaning procedure is recommended.

1. Foreign matter such as chewing gum should be removed with a scraper or putty knife. Then apply an all purpose, biodegradable cleaner/degreaser that can be mixed with water to the surface.
2. Scrub surface with a long-handled, fiber bristled brush or floor machine.
3. Rinse with clean water and dry.

Although extremely durable, **AS-250** is not a permanent coating and will require occasional touch up, especially in heavy traffic areas.

## Specifications

VOC:	2.07 lbs. per gal. (250 grams/liter)
VOLUME SOLIDS (%):	71%
POT LIFE:	4 hours @ 70°F (21°C)
DRY TIME:	Light Traffic - 12 hours @ 70°F (21°C) Heavy Traffic - 72 hours @ 70°F (21°C)
ESTIMATED COVERAGE:	60 sq. ft. per gallon – spray 50 sq. ft. per gal. – trowel 40 sq. ft. per gal. – roller
WEIGHT PER GALLON:	14.9 lbs. per gal. (1.80 kg./liter)
FLASH POINT:	81°F (27°C) - CC
COEFFICIENT OF FRICTION ASTM F609:	Dry - 1.05 Wet - 1.05
PACKAGING:	1 gallon kits 5 gallon kits
SHELF-LIFE:	2 years in unopened container
STANDARD COLORS:	Black, Gray, Haze Gray, Tile Red and Safety Yellow

<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 Polymers Coatings North America, 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, Polymers Coatings North America will, at its option, either replace the product or refund the purchase price. ITW Polymers Coatings North America 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 Polymers Coatings North America 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 Polymers Coatings North America's sole liability, for breach of warranty, negligence or otherwise, shall be the replacement of product or refund of the purchase price, at ITW Polymers Coatings North America's election. Under no circumstances shall ITW Polymers Coatings North America 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 Polymers Coatings North America. 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 Polymers Coatings North America 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>
--	--