



Industrial Steel



MONOPOLE INC.
Manufacturer of
U.S. SPECIALTY COATINGS

INDUSTRIAL STEEL is a direct-to-metal coating developed for the shipping and storage container industry.

INDUSTRIAL STEEL displays resistance to corrosion and harsh environmental conditions, impact, abrasions, humidity and UV exposure. It dries hard and very fast for a quick return to service. It can be applied in one coat over properly prepared or primed substrates; some darker colors may require a second coat.

COMMON USES:

Structural Steel
Aluminum
Piping
Intermodal Containers
Tank Cars
Freight Cars
Bridges
Storage Tanks
Machinery/Equipment

FEATURES:

Fast Drying
Interior/Exterior
Apply in low temperatures
Low Cost
Easy Application
Superior Adhesion and Film Hardness
Excellent Scrub Resistance
Resistant to Household Chemicals

Packaging: Available in One-gallon Cans & Five-Gallon Pails
Gloss: #2200 Low-Gloss: #2100 Matte: #2300

Sheen Levels: Gloss: 60°-70°; Low-Gloss: 25°-35°;
Matte: 5°-15°

Bases: White, Neutral

White Base: 4 Oz/Gal Short-Fill
Gloss: #2200-50 Low-Gloss: #2100-50 Matte: #2300-50

Neutral Base: 12 Oz/Gal Short-Fill
Gloss #2200-20 Low-Gloss #2100-20 Matte: #2300-20

APPLICATION:

Mix well before using. Apply with a quality brush, roller or airless sprayer. Apply two coats to ensure a sealed and uniform finish. Ambient and surface temperature must be above 55°F and relative humidity below 80%. Do not apply in windy conditions or if rain is imminent within 48 hours.
Apply a small pre application test patch.

Brush: Use a good quality synthetic bristle brush.
Roller: Short nap 1/4-3/8" synthetic cover for smooth surfaces. Long nap synthetic cover for rough surfaces.
Air-Atomized Spray:

Pressure: Tip 0.055-0.070, Atom Pressure: 40-60 psi
Siphon: Tip 0.055-0.070, Atom Pressure: 40-60 psi
HVLP: Tip 0.043-0.070, Atom Pressure: 10 psi at tip
Airless Spray: Fluid Pressure: 2000-3000 psi. Tip Size: .013"-.17". Filter: 100 Mesh.

PHYSICAL PROPERTIES

Composition: Water Base Acrylic Polymer

VOC: < 200 g/L

White Base Weight Solids: 45% ±2

White Base Volume Solids: 32%

Clear Base Weight Solids: 34% ±2

Clear Base Volume Solids: 30%

Weight per Gallon: Neutral: 9 Lbs; White Base: 10.5 Lbs

Finish: Matte, Low-Gloss and Gloss

Viscosity: 90-100 Kus

Coverage: 250-500 Sq. Ft per Gallon

Recommended Dry Mills: 1 - 3

Recommended Wet Mills: 2.5 - 7.5

Always apply a test patch to check for adhesion, compatibility and proper results.

Drying Time @77° and 50% Relative Humidity:

Surface Dry: 15-20 Minutes

Recoat Time: 1-2 Hours

Cooler Temperature, higher humidity and film thickness will require longer drying time.

Shelf Life: 2 Years

SURFACE PREPARATION:

Surface preparation is critical to product performance.

Surfaces must be clean, dry and free of rust/corrosion, dirt, chalk, grease, oils, salts and contaminants that inhibit proper adhesion. Clean surfaces thoroughly by scrub washing with soap or a detergent. Pay special attention to areas where build-ups of dirt, grease and oil exist. These areas should be scrubbed clean.

Existing peeled or poorly bonded paint should be scraped and sanded to a sound surface. Dull glossy surfaces by sanding or by using a chemical de-glosser. All repairs necessary should be completed prior to the application. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer.

Previously Painted Surfaces: Remove all loose, peeling or poorly bonded paint. Check adhesion of old paint before repainting. Mechanically clean and abrade using 60-80 grit sandpaper.

Metals: Remove all oils or films with a neutral detergent or emulsion cleaner per SSPC-SP1. Blast lightly with fine abrasives or conduct a light etching. Then clean the surface and coat within 3-4 hours to avoid rust/oxidation.

CAUTIONS: Protect from freezing. Before using, carefully read CAUTIONS on label. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately.

CLEANUP INFORMATION Clean spills, spatters, hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

WARRANTY INFORMATION: MONOPOLE believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products. It is the applicator's responsibility to thoroughly test the product in the specific application to determine its safety and performance capabilities. Since use of this product is beyond our control, MONOPOLE, INC. cannot assume any risk or liability for results obtained when not used according to our specifications and directions. Unless MONOPOLE provides a specifically written statement of fitness for a particular use, MONOPOLE'S sole warranty is that the product will meet its current sales specifications. MONOPOLE disclaims any other expressed or implied warranties, including the warranty of merchantability and fitness for use. Your exclusive remedy and MONOPOLE'S sole liability for breach of warranty is limited to a refund of the purchase price or replacement of any product proven to be defective. In no event shall the seller be liable for any loss of profits or other consequential damages, including labor charges.

PERFORMANCE CHARACTERISTICS:

Crosshatch Adhesion:

Method: ASTM D3359

Result: 5B

Pencil Hardness:

Method: ASTM D3363

Result: F/3H

Impact Resistance:

Method: ASTM D2794, 250 Lbs

Result: Pass

Flexibility:

Method: ASTM D522, 180° bend, ½ Mandrel

Result: Pass

Gloss At 60°

Method: ASTM D523

Result: 80-90%

Fade Resistance:

Method: ASTM D151, QUV Type A Bulb, 1,000 Hours

Result: AE=0.89

Dry Heat Resistance:

Method: ASTM D2485

Result: 325°F

Cyclic Prohesion:

Rating 1-10 10=best

Method: ASTM D5894, 2 cycles, 800 hours

Result: 10 per ASTM D610 for rusting

Result: 10 per ASTM D714 for blistering

Result: 10 per ASTM D1654 for corrosion

Salt Fog Resistance:

Method: ASTM B117, CRS, 30 Day Cure

Result: 800 hours @4 DFT