•TRUSTED QUALITY SINCE 1921•
RUST-OLEUM COMMERCIAL
INDUSTRIAL COATINGS

RUST-OLEUM® THE MULE

DESCRIPTION AND USES

The MULE is an easy to use, versatile, abrasion resistant coating designed for high traffic areas that are subject to routine cleaning and disinfecting. This Modified Urethane Latex Epoxy (The MULE) can be used for interior or exterior applications on walls, doors, trim, railings and even floors.

This coating complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities.

Floor Use: Recommended for pedestrian walkways and line striping exposed to heavy foot traffic and carts, showrooms, storage areas and light traffic garages. Not recommended for heavy vehicle or constant forklift traffic areas or any areas exposed to frequent moderate or harsh chemicals.

MPI #151, #151X-Green, #153, #153X-Green, #154, #154X-Green Certified. (Refer to the MPI website for the most current listing of MPI certified products.)

PRODUCT FEATURES

- Versatile, abrasion resistant coating for walls, doors, trim, and floors
- Highly washable, ultra smooth finish
- Great adhesion on multiple surfaces
- Low odor, water-base formula
- Interior or exterior use
- VOC compliant nationwide

PRODUCTS

FINISHES - GLOSS

1-Gallon	5-Gallon	DESCRIPTION
375645	----	Black
381208	----	Dunes Tan
393447	----	Navy Gray
393446	----	Safety Blue
393445	----	Safety Red
375661	----	Safety Yellow
375642	----	Silver Gray
375658	393941	White

FINISHES - SEMI-GLOSS

1-Gallon	5-Gallon	DESCRIPTION
393451	----	Black
393450	393942	White
374340	374346	Light Tint Base
382498	382555	Deep Tint Base
374342	374348	Masstone Tint Base

FINISHES – SATIN/EGGSHELL

1-Gallon	5-Gallon	DESCRIPTION
393449	----	Black
393448	393943	White
374341	374347	Light Tint Base
382500	382557	Deep Tint Base
374343	374349	Masstone Tint Base

TINT BASE MAXIMUM COLORANT

1-Gallon	5-Gallon	DESCRIPTION
4 oz.	20 oz.	Light Tint Base
8 oz.	40 oz.	Deep Tint Base
12 oz.	60 oz.	Masstone Tint Base

NOTE: For best results and color consistency combine containers of the same color together and mix until uniform.

PRODUCT APPLICATION

SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt, and chemical contaminants by washing the surface with Rust-Oleum® Professional Cleaner Degreaser, commercial detergent or other suitable cleaner. Mold and mildew must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application. Bare surfaces must be primed with the appropriate Rust-Oleum primer specified on this technical data sheet.

DRYWALL: Surfaces should be clean, dry, sound, and free of dust, dirt, excessive chalky material, grime, grease, oil, wax, mildew, wallpaper, adhesive or any contamination that may interfere with adhesion. If unsure of cleanliness, always wash surface with an appropriate ammoniated cleaning solution or solvent (do not use TSP as a cleaner). Remove any peeling and/or unsound coatings. Bare surfaces need to be primed with Rust-Oleum Universal Acrylic Primer.

METAL: Hand tool (SSPC-SP-2) or power tool (SSPC-SP-3) clean to remove loose rust, scale, and deteriorated previous coatings to obtain a sound surface. All weld spatter should be removed along weld seams, rough welds should be ground smooth, and all sharp edges should be ground to a smooth radius. For maximum adhesion and corrosion protection, we recommend a using Rust-Oleum Universal Acrylic Primer on bare and previously painted surfaces. Abrasive blasted steel will require two coats of primer.

CONCRETE OR MASONRY: New concrete or masonry must cure 30 days before coating. Any concrete surface must be protected from moisture transmission from uncoated areas. Remove all loose, unsound concrete. Bare vertical surfaces need to be primed with Rust-Oleum Universal Acrylic Primer.

CONCRETE BLOCK: Bare vertical surfaces need to be primed with Rust-Oleum Zinsser® Block Filler to a pinhole free surface.

CONCRETE FLOORS: New concrete or masonry must cure 30 days before coating. Remove laitance and create a surface profile by either acid etching with Rust-Oleum 108 Cleaning and Etching Solution, or by grinding. If etching, refer to the 108 Cleaning and Etching Solution's Technical Data Sheet for complete application instructions. Rinse thoroughly and allow to dry. The concrete must be fully dry prior to coating application. After etching, the concrete should have a texture, which resembles fine grit sandpaper. Repeat the process if necessary. Surface sealers and curing agents must be removed by grinding. Vacuum to remove fine dust and debris. The floor should be dry and dust free prior to application. For previously painted floors, existing coatings need to be in sound condition, clean, dull, and dry.

UNCOATED, NEW WOOD: Use on all species of pressure-treated lumber, Pine, Fir, Hemfir, Cypress, Cedar, Redwood, Poplar, Hickory, and other North American hardwoods. Ideal for weathered wood where hiding signs of aging is desired. New wood should age for a minimum of 6 months before applying The MULE. Bare surfaces need to be primed with Rust-Oleum Universal Acrylic Primer.

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PRODUCT APPLICATION (cont.)

SURFACE PREPARATION (cont.)

UNCOATED, NEW WOOD (cont.): After cleaning, conduct a splash test to ensure the surface is ready to be coated. Sprinkle several handfuls of water on multiple areas of the surface. If the water absorbs rapidly, the surface is ready to be coated. If the water beads, puddles or is not absorbed, an internal or external barrier exists and must be eliminated (strip/sand) before painting can begin.

FACTORY PRE-PRIMED MATERIALS: For products that are pre-primed by the manufacturer, please review their recommended painting guidelines. The MULE is compatible with most primers; however, a test patch is suggested.

PREVIOUSLY PAINTED: Previously painted surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding to create a surface profile. The MULE is compatible with most coatings; however, a test patch is suggested.

WARNING: If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead**.**

APPLICATION

Apply only when the air and surface temperatures are between 50-90°F (10-32°C) and the surface temperature is at least 5°F (3°C) above the dew point. The relative humidity should not be greater than 85%.

The dry times published on page 3 are under conditions of 70-80°F (21-27°C) and a relative humidity of 50%. At lower temperatures, the dry times will be increased and the full development of the coating's physical properties will take longer. Improved air flow will aid the curing process when temperatures are below 50°F or the relative humidity is greater than 80%.

EQUIPMENT RECOMMENDATIONS

(Comparable equipment also suitable)
BRUSH: Use a high-quality synthetic bristle brush.
ROLLER: Use a high-quality woven roller cover with nap size of 1/4", 3/8", 1/2" or 3/4" depending on how smooth or textured the surface is.

AIRLESS SPRAY

Fluid Pressure	Fluid Tip	Filter Mesh
1,800-2,500 psi	0.013-0.017	100

Caution: Protect surrounding surfaces from over spray. Over spray can be wet or dry depending on height of work, weather, environmental conditions, and application equipment. Wet over spray can adhere to unwanted surfaces. Dry over spray may be removed by wiping or washing. Always clean dry over spray from hot surfaces before fusing occurs as surface temperatures can be higher than the air temperature.

THINNING

BRUSH/ROLLER: None
AIRLESS SPRAY: Up to 10% with clean water

PRODUCT APPLICATION (cont.)

CLEAN-UP

Clean hands, tools, spills and splatters with soap and warm water.

PERFORMANCE CHARACTERISTICS

60° GLOSS
METHOD: ASTM D523-14
RESULT: Satin/Eggshell - 20-25 units
Semi-Gloss - 35-55 units
Gloss - 70-80 units

BLOCKING RESISTANCE
METHOD: ASTM D4946-89
RESULT: Light colors 4 hours
Medium to dark colors 8 hours

ADHESION
METHOD: ASTM D3359
RESULT: (Over Universal Acrylic Primer)
Wood - 5A
Cold Rolled Steel - 4A
Aluminum - 4A

SCRUB RESISTANCE (Gloss Black Tested)
METHOD: ASTM D2486-17
RESULT: Passed 469 scrub cycles

TABER ABRASION (Semi-Gloss White Tested)
METHOD: ASTM D4060 C17 wheel, 1000 g, 1000 cycles
RESULT: 75 mg of loss

PENCIL HARDNESS
METHOD: ASTM D3363
RESULT: (2 coats, 7-day cure) HB

COEFFICIENT OF FRICTION (Floor Application)
METHOD: ASTM E303
RESULT: Dry 0.87, Wet 0.7

CLEANER/DISINFECTANT (15-minute dwell time)	RESULT
Concrobium Broad Spectrum Disinfectant II	ND
Krud Kutter Heavy Duty Cleaner & Disinfectant	ND
Moldex Disinfectant (2%)	ND
Clorox Bleach (5%)	ND
Pine Sol (2%)	ND

CLEAN/DISINFECTANT: Chart Key
ND= No Defect
DG= Deglossing
RC= Recovered

RECOMMENDED CLEANERS/DISINFECTANTS

- Concrobium® Broad Spectrum Disinfectant II
- Krud Kutter® Heavy Duty Cleaner and Disinfectant
- Moldex® Disinfectant (2%)

Form: ARJ-2356
Rev.: 050125

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PHYSICAL PROPERTIES

		THE MULE
Resin Type		Modified Urethane Latex Epoxy
Pigment Type		Varies with color
Solvents		Water, Glycol Ether
Weight	**Per Gallon**	8.6-10.9 lbs.
	Per Liter	1.0-1.3 kg
Solids	**By Weight**	30-52%
	By Volume	28-36%
Volatile Organic Compounds		<50 g/L
Recommended Dry Film Thickness (DFT) Per Coat		1.5-2.5 mils
Wet Film to Achieve DFT		4-7 mils
Practical Coverage at Recommended DFT (assumes 15% material loss)		155-330 sq. ft./gal.
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	**Touch**	15 minutes
	Handle	45 minutes
	Recoat	2 hours
	Light Foot Traffic	24 hours
	Vehicle Traffic	3 days
	Full Cure	7 days
Flash Point		>200°F (>93°C)
Shelf Life		5 years
Storage		**PROTECT FROM FREEZING - NOT FREEZE THAW STABLE**
Safety Information		For additional information, see SDS

Calculated values are shown and may vary slightly from the actual manufactured material.