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Extended Season MMAX[®] Colored Lane Treatment with Corundum

by PPG

PRODUCT DESCRIPTION: Extended Season MMAX[®] colored lane treatment is a preferential lane treatment system combining methyl methacrylate resins with hardwearing aggregate and colorfast pigments to deliver an extremely durable, non-slip, highly visible, and color-stable area marking that can be applied year-round. MMAX[®] colored lane treatment can be used to delineate bike lanes, bus lanes, or other specialty applications, where a durable area marking is required.

ADVANTAGES:

- Extended season application in summer and winter
- Durable
- Color-stable
- Fast back-to-traffic
- Non-slip surface
- Easy to apply; pre-packaged for on-site mixing and convenience

AVAILABLE COLORS:

- EF Green (PMS 361C) 999670G-KIT
- Transit Lane Red (PMS 7622C) 999670TRAN-KIT
- Truffle (PMS 7530C) 999670TR-KIT
- Terracotta (PMS 7595C) 999670TC-KIT
- Brick Red (PMS 7624C) 999670BR-KIT
- Hollywood Green (PMS 7484C) 999670G349-KIT
- Red (PMS 200C) 999670R-KIT
- White 999670W-KIT

TECHNICAL DATA:

ASTM Testing	Results	Test Method	
Hardness	50-60 Shore D	D2240	
	Corundum only: 9	Mohs Scale	
Elongation	> 30%	D638 Type I	
No Pick-Up Time at 77°F	< 30 minutes	D711	
Density	18.5 +/- 0.5 lbs/gallon	D1475	
Viscosity	85-105 Krebs	2195-99	
Total Solids	>99%	D2369	
Pot Life	< 15 minutes	AASHTO T-237	
VOC	< 100 grams/liter	D3960-05	
Skid	> 60 BPN	E303	
Water Absorption	< 0.25%	D570	

PACKAGING:

One kit includes:

- MMAX[®] colored lane treatment resin: 2 gallons / 7.57 liters
- Supplied in 5 gallon pail for easy mixing
- MMAX[®] material aggregate: 1 25.0 lbs. / 11.34 kg bag
- Catalyst: 8 fl. oz. / 236 ml (0.52 lbs. / 0.24 kg)

THEORETICAL COVERAGE: Each MMAX[®] colored lane treatment kit mixes to 2.79 gallons and covers approximately 45-50 sq. ft. @ 90-mil build thickness. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, method of application, surface irregularities, overthinning, climate conditions, or excessive film build.

DRY TIME: MMAX[®] colored lane treatment dries to a lab ASTM D711 no pickup in less than 30 minutes when ambient and surface temperature are 77° F at $50\pm5\%$ humidity. Dry time is temperature, humidity, and film thickness dependent. MMAX[®] colored lane treatment must be 100% cured, which will be a hardened, solid state, before traffic is permitted. Curing typically takes 30-60 minutes and is based on temperature and amount of catalyst added.

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STORAGE: Avoid extreme storage temperatures. Keep materials in dry, protected areas, between 40°F-80°F. Keep out of the direct sunlight and protected from open flame.

SHELF LIFE: Shelf life is one year in unopened packaging.

PRODUCT APPLICATION INSTRUCTIONS

RECOMMENDED EQUIPMENT: Squeegees shall be designed for heavy-duty usage and sourced locally. Rollers shall be medium nap in texture and require a roller cage and handle. Sprayers shall be capable of 98:2 mix ratios by weight of resin to catalyst. Drill shall be high speed, high torque, capable of supplying enough power to thoroughly mix MMAX[®] colored lane treatment additives when paired with a paint mixing paddle.

SURFACE PREPARATION: MMAX[®] colored lane treatment can be applied on stable, well compacted asphalt or nonbituminous concrete surfaces, such as Portland cement concrete. New substrates should be allowed to age harden or cure for minimum 15 days (asphalt) to 30 days (concrete) before installation. Clean the application area thoroughly. All loose particles dirt, sand dust, etc. - must be removed. Use a broom and power blower or compressed air. The surface must be clean, dry, and free of all dust, oil, debris, and any other material that might interfere with the bond between the material and surface to be treated. Clean areas containing chemical contaminants such as vehicle fluids using a degreasing solution. Ensure removal of contaminants and degreasing solution well in advance of the application. All curing compounds shall be completely removed from concrete surfaces prior to installation by shot blasting, water blasting, or grinding. Existing concrete surfaces shall be wire brushed but may require blasting or grinding, dependent on condition. Aged surfaces containing reflective cracking should be repaired or it should be expected that the reflective cracking may reappear.

OBSTACLES: Pavement markings that are to be left in place, utilities, drainage structures, curbs, and any other structure within or adjacent to the treatment location shall be masked to protect from application. Existing pavement markings conflicting with the surface treatment should be removed by grinding or water blasting. Extra care should be taken to thoroughly remove the dust and debris caused from grinding.

MIXING: Catalyst quantity shall be based on pavement temperature per the materials mixing guide below and must be mixed very thoroughly with the resin using a drill. Check spray equipment capabilities to determine whether to add aggregate to mix or broadcast during application. Material with aggregate shall mix to approximately 2.79 gallons (10.55 liters) and weigh approximately 52 lbs. (23.6 kg). Clean the mixing paddle between uses or material will immediately initiate curing if exposed to previously catalyzed material (and not cleaned).

Component	Quantity	Unit
Resin	2 (7.6)	gallons (liters)
Aggregate	25.0 (11.34)	lbs (kg)
Powder Catalyst	0.52 (0.24)	lbs (kg)
< 80°F (< 27°C)	8 (0.24)	fluid ounces (liters)
Powder Catalyst	0.26 (0.12)	lbs (kg)
80°F to 130°F (27°C to 54°C)	4 (0.12)	fluid ounces (liters)
Powder Catalyst	0.24 (0.108)	lbs (kg)
130°F to 150°F (54°C to 65°C)	3.5 (0.10)	fluid ounces (liters)

MATERIALS MIXING GUIDE

INSTALLATION WITHOUT SPECIALIZED EQUIPMENT: Mixed MMAX[®] colored lane treatment shall immediately be poured onto the pavement and distributed at 45-50 sq. ft. per pail using a squeegee. Trowels can be used where a squeegee is not effective. Use roller to back roll the material to remove working lines and create a consistent, anti-slip texture. Remove masking as material gels, but before it cures.

INSTALLATION WITH SPECIALIZED SPRAY EQUIPMENT: Sprayers shall be capable of 98:2 mix ratios by weight of resin to catalyst. Aggregate can either be broadcast after the first spray pass, followed by a second pass; or mixed into the resin part depending on spray equipment capabilities.

CLEAN UP: Clean all tools in acetone before material is cured. Clean in well ventilated areas and do not come into direct contact with solvents - use proper personal protective equipment per the Safety Data Sheet. Acetone is extremely flammable; take proper handling measures to reduce static discharge and combustion. Dispose of all contaminated materials in accordance with all applicable federal, state and local laws and regulations.

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