Macrylex S26

Methyl methacrylate resin topcoat



DESCRIPTION

Macrylex S26 is a 100% reactive, medium viscosity methyl methacrylate resin developed as a sealer/topcoat over various MMA systems utilizing one or more body coat combinations of Macrylex B18, Macrylex FR and also directly over Macrylex Primer as a high builds coating system. Macrylex S26 is a chemical resistant coating specifically designed for food and beverage plants, dairies and areas having constantly wet surfaces with food and fat combination. It is suitable for use in numerous other applications, both indoors and outdoors.

ADVANTAGES

- Rapid cure with short recoat time (60 min)
- Suitable for USDA food handling areas
- UV resistant, Non-chalking
- Good leveling and flow characteristics
- VOC Compliant, Meets USGBC LEED Requirements
- Use over wide temperature range even below freezing temperature

SUBSTRATE REQUIREMENTS

- The substrate must be dry, free of dirt, waxes, curing agents and other foreign materials
- Do not store outside in direct sunlight, storage temperature must be less than 80°F
- Maintain coating thickness at 10-20 mils to minimize yellowness and possible micro cracking
- On or below grade installation must have an efficient vapor barrier under the slab (min 10-15 mil)
- Moisture vapor transmission must be less than 3 lb per ASTM F1869 and less than 80% RH per ASTM F2170 unless Düraamen moisture mitigation system used
- The odor must be contained and/or ventilated with negative air flow as necessary
- Small enclosed spaces require proper negative air flow ventilation to ensure proper curing.
- MMA odor must be contained and/or ventilated with negative air flow as necessary

COMPOSITION

Macrylex S26 is a 100% reactive methyl methacrylate resin.

COLOR SELECTION

Macrylex S26 is supplied clear with slightly blue tint. Color packs are available for selected colors. Color pack mix ratio is 1 quart pigment per 5 gallons resin for most colors. Certain light colors may require 2 quarts per 5 gallons.

SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful high performance flooring system. All substrates must be properly prepared as Outlines in Duraamen's Technical Bulletin #1. In addition, all Macrylex Flooring Systems require a minimum surface profile of 4 or 5 (CSP 4 to 5) as outlined in ICRI Guideline 310.2-1997 formerly G-03732 (available from www.ICRI.org). Work must be performed by trained or experienced contractors or maintenance personnel. Shot blast the substrate to remove laitance and expose surface cracks. Clean out cracks with oil-free compressed air.

MIXING & APPLICATION

Macrylex S26 requires the addition of Macrylex Hardener to stat the hardening process. The amount of hardener must be adjusted to the respective surface and material temperature (see table on next page). In order to achieve the best curing it is necessary to apply Macrylex S26 with a short-medium nap roller. Coating thickness should be a minimum of 10 mils and maximum of 20 mils (80-160 sq. ft./gal) over a smooth basecoat or maximum of 25-30 mils when used as grout coat over a textured broadcast system, depending on the profile of the base material. 100 sq. ft./gallon is average over a smooth basecoat. If the coating exceeds 20 mils over a smooth basecoat, the top coat may remain visibly blue or yellow and surface micro cracks are possible. It is best to spread material with a trowel, squeegee or notched squeegee to the desired thickness and roll in one direction, then roll in 90° patterns. This will reduce the occurrence of roller marks in the top coat. IMPORTANT: Back rolling should be performed immediately after spreading, and should be completed before reaching the upper limit of the pot life time, as the resin quickly transitions from fluid to sticky within a few minutes. Very light surface rolling may still be performed towards the end of the working time, but do not allow the full weight of the roller to fully imbed in the resin and contact the bond line or problems may result (resin may become "stringy" and pull away from the previous layer). Also, be aware that addition of the pigment to the clear resin may slightly speed up the cure process. Use a clean roller cover with each successive batch.

Macrylex S26 requires the addition of Macrylex Hardener to start the hardening process. The amount of hardener must be adjusted to the respective surface temperature (see table on next page). At temperatures below 40°F, Macrylex CTA must be used in addition to the amount of hardener used at 40°F level.







MACRYLEX S26 mix ratios, pot life and hardening /temperature			
Temp (F) of resin, air & surface	Hardener by volume (oz) per gallon of resin	Pot Life (min)	Hardening Time (min)
+30°F	4 oz + CTA	65-75	80
+40°F	3 oz	65-75	80
+50°F	3 oz	30-35	45
+60°F	2-3 oz	20-25	30
+70°F	2 oz	15-18	30
+80° - 90°F	2 oz	14-17 min	20

^{*} Do not use less than 2 oz of Macrylex Hardener by volume unless confirmed by on-site testing

IMPORTANT NOTE: Yellowing of the resin will occur with excessive thickness or higher amounts of hardener, beginning in the range of 3-4 oz. It is advised to use lower amounts and allow extra cure time, particularly with clear resin or very light colors.

Macrylex CTA: At temperatures below 40°F, Macrylex CTA, Cold Temperature Accelerator must be used in addition to the amount of hardener used at the 40°F or 30°F level. As a rule of thumb, add 1/2oz by volume per gallon of resin at 39°F to 32°F, up to 2.0oz by volume per gallon at 20°F; increasing the quantity gradually in a consistent linear progression as the temperature decreases.

IMPORTANT NOTE: Macrylex CTA MUST be added to the Resin and thoroughly blended BEFORE adding Macrylex Hardener, or hazardous decomposition may occur (violent foaming). Macrylex CTA will cause yellowing of the resin. Therefore, it is advised to use pigmented Macrylex resins to reduce the appearance of yellowing..

PHYSICAL PROPERTIES

Percent reactive	100%	
VOC	<50g/L	
Working Life, 50-70°F	14-75 minutes	
Recoat time	30-80 minutes	
Viscosity @ 75°F	380-390 cps	
Weight per gallon	8.3 lbs	
Heat resistance, dry heat	216°F	
Shore D Hardness	65-70	

CLEAN UP

Clean tools and equipment with Macrylex 01 Monomer, lacquer thinner or MEK. Consult MSDS for safety and health precautions.

MAINTENANCE

Macrylex S26 considered to be a low maintenance flooring solution. Certain textures and environment however require specific cleaning with bristled bristles. Due to the thermoplastic character of MMA resins, black marks can occur from forklifts and tires skidding.

AVAILABILITY

Duraamen Products are available throughout United States and also Worldwide. Please contact us info@duraamen.com or visit www.duraamen.com for latest information

STORAGE

Store in a cold and dry place, below 80°F, out of direct sunlight. Do not store near open flame or food. Shelf life is 6 months in the original unopened containers. After extended storage additives and fillers may separate. It should be inspected for any visible signs of settlement, polymerization, or paraffin coagulation (clumps, strands). Thoroughly mix pails or drums (use a drum mixer, do not rely on rolling the drum on the floor) and pour into new containers to inspect resin before use.

HELPFUL HINTS

Adequate cross ventilation should be provided. Good ventilation during the processing ensures a good cross linking and hardening. Read, understand and follow SDS instructions prior to use. Use only as directed. If the substrate and/or material temperatures above 90°F, DO NOT APPLY the material, DO NOT apply material unless prepared for very short working time and possible roller marks, etc.

WARRANTY

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