

# Macrylex P12

## Reactive methyl methacrylate primer

### DESCRIPTION

Macrylex P12 is a 100% reactive methyl methacrylate primer for all Macrylex floor and wall systems. It is designed for use as a filler coat to level uneven surfaces and fill in any scratches or imperfections. This reactive resin hardens very rapidly with the addition of Macrylex Hardener, even at low temperatures.

### ADVANTAGES

- Very rapid cure for quick recoat (approx. 60 to 90 min)
- Good wetting properties and excellent bond to concrete
- VOC Compliant (100% solids), meets USGBC LEED Requirements
- Use over wide temperature range – even below freezing

### SUBSTRATE REQUIREMENTS

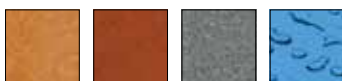
- The substrate must be dry and free of dirt, waxes, curing agents and other foreign materials
- It should not be installed on fresh concrete until maximum shrinkage has occurred (at least 30 days after placement)
- Concrete substrates below or above grade must have an efficient vapor barrier under the slab (minimum 10-15mil)
- The Moisture vapor transmission must be less than 3 lbs/1000sqft/24hr as per ASTM F1869 and relative humidity less than 80% as per ASTM F2170
- The application of this primer MUST yield a consistent resin-rich layer. Re-priming is required if resin gets absorbed into the substrate.
- Do NOT perform a “full broadcast to excess” of aggregate into Macrylex P12. Broadcast lightly. Do NOT use as binder resin for troweled mortars and thick slurry toppings.

### COMPOSITION

The Macrylex P12 is a 100% reactive Methyl Methacrylate resin.

### COLOR SELECTION

The Macrylex P12 is supplied clear. Color packs are available for selected colors. Add 1-quart pigment per 5 gallons of resin.



### 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](http://www.ICRI.org)). Work must be performed by trained or experienced contractors or maintenance personnel.

### MIXING & INSTALLATION

Macrylex P12 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 below). At temperatures below 40°F, Macrylex Cold Temperature Accelerator must be used in addition to the amount of hardener.

#### Macrylex P12 Resin

#### Mix Ratios, Pot Life and Hardening Temperature

Temp. (°F) of Resin, Air & Floor Surface	Hardener by Volume (oz) per gallon of Primer resin	Pot life (min.)	Hardening Time (min.)
+30°F	9 – 10 oz	10 to 12	Approx. 30
+40°F	7 - 9 oz	10 to 12	Approx. 30
+50°F	5 – 7 oz	8 to 10	Approx. 25
+60°F	4 – 5 oz	8 to 10	Approx. 25
+70°F	4 oz	8 to 10	Approx. 20
80°F - 90°F	4 oz	6 to 8	Approx. 20

Do not use less than 4oz Macrylex Hardener by volume unless confirmed by testing onsite.

Consult Duraamen if performing mix ratio by weight instead of by volume

**Macrylex MAA:** The addition of this moisture adhesive additive is recommended for damp substrates. Add 5% by volume (or 6.5oz by volume per gallon) to Macrylex P12 during mixing.

**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. Darker colors will be less affected than lighter colors.

**Macrylex PAA:** It is recommended for coating glazed tile or stainless steel when adequate surface preparation cannot be performed. Add 0.25% by volume (or 0.30 ounces by volume per gallon) to Macrylex P12 during mixing. NOTE: Macrylex PAA will inhibit the cure time by 10-20 minutes or more depending on temperature and amount of Macrylex Hardener. It is optional to increase amount of Macrylex Hardener to compensate if needed. As a rule of thumb, at 70°F increase the amount of Macrylex Hardener by approximately 25%, at 40°F and colder increase approximately 100%.

**Macrylex P12** is spread uniformly on the surface (no puddles) with notched trowels, and/or squeegees and back rolled with short-medium nap rollers at no less than 10° s<sup>q</sup>. ft./gallon very absorbent surfaces. IMPORTANT: Two coats may be necessary on very porous substrates to get a consistent resin rich surface. This is necessary to ensure proper bonding with the next layer. It is recommended to lightly broadcast 20 mesh sand or colored quartz (approximately 1-2 lb/ s<sup>q</sup>. ft.) into the wet primer. This will help in the application of the subsequent coating or troweled mortar. Apply next application resin only after the primer is completely hardened.

## PHYSICAL PROPERTIES

Percent Reactive	100%, zero VOC
Working life, 50°F - 70°F	8-10 minutes, will vary with temp. & amount of Hardener
Recoat Time	45 – 60 minutes
Viscosity	250-270cps
Weight per gallon	8.3 lb
Bond Strength	300-400 psi (100% concrete failure)

## WARRANTY

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## CLEAN UP

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

## COVERAGE

1 gallon covers 100 s<sup>q</sup>. ft. per coat. Two coats may be necessary on very porous substrates. Must achieve a consistent resin-rich layer over the entire substrate.

## AVAILABILITY

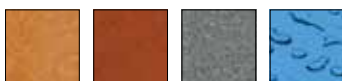
Duraamen Products are available throughout United States and also Worldwide. Please contact us [info@duraamen.com](mailto:info@duraamen.com) or visit [www.duraamen.com](http://www.duraamen.com) for latest information

## 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.



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