

Blome Primer 205 UV High Elongation Fluorescent Vinyl Ester Primer

PRODUCT DESCRIPTION

Blome Primer 205 UV is a two-component, fluorescent, Vinyl Ester resin based primer for steel, concrete and other substrates as specified. It is used to prime concrete, steel and other substrates prior to application of Blome International vinyl ester coatings, that cannot be spark tested due to their conductivity. Its fluorescent properties allow for detection of pinholes using strong UV (black) light. Its high elongation properties mitigate stresses between the vinyl ester topcoats and the substrate. Quick curing allows fast installation of the appropriate topcoat material. Primer 205 UV exhibits outstanding adhesion to steel and concrete.

GENERAL USES

Primer 205 UV is used as a primer in conjunction with Blome International conductive vinyl ester materials in a wide variety of applications. Typical applications include:

- Secondary containment linings
- Tank linings
- Trench linings
- Scrubber linings

HANDLING CHARACTERISTICS

- Primer 205 UV is available in a convenient pre-measured component kits. It is easily applied by brush or roller. Its excellent wetting characteristics and low viscosity facilitate application.
- Primer 205 UV is normally applied at 150-200 square feet per gallon on concrete and other porous surfaces.
- Primer 205 UV is normally applied at 250-300 square feet per gallon on steel and other non-porous substrates.

TYPICAL PROPERTIES WET

Color: Yellow

Gel Time at 70°F (200 g): 40-60 minutes (less at higher mass/temperatures)

CURED

Tensile Strength: 8,750 psi

Tensile Elongation: 8.7%

Bond Strength to Steel: >1,500 psi

Adhesion to concrete: Failure in concrete

Water absorption: Very low, 0.15%

Heat Deflection Temperature: 195°F

VOC (Measured): 100 g/L maximum*

VOC Category: Industrial Maintenance
Coating

*Complies with SCAQMD VOC category limit for an Industrial Maintenance Coating

Packaging & Storage

Blome Primer 205 UV is packaged in 5-gallon kits. Each component is pre-measured and ready to use. Store unopened components in a dry place, out of direct sunlight and protected from the elements. Storage temperature should be 50-60°F. Properly stored, Primer 205 UV will have a minimum shelf life of 3 months. Refer to the date of manufacture printed on the label.

SPECIFICATION GUIDE

Prime all surfaces with a two-component, high elongation vinyl ester primer meeting the generic formulation and performance characteristics of Blome Primer 205 UV as manufactured by Blome International, O'Fallon, MO (636) 379-39119. Install in accordance with the latest data sheet for Blome Primer 205 UV.

APPLICATION GUIDELINES ENVIRONMENTAL CONDITIONS

Primer 205 UV should be applied at surface and air temperatures of 50°F minimum and 95°F maximum. Air temperature should always be at least 5°F greater than the dew point. Primer 205 UV should be applied when the ambient air and substrate temperature is stable or descending to avoid pinholes and bubbles due to concrete outgassing.

JOBSITE STORAGE OF MATERIALS

Proper storage of Blome International products is important to a successful application. Follow these general storage procedures:

1. Store components (Resin and Catalyst) unopened, at 50-60°F, out of direct sunlight and protected from the elements.
2. Keep away from heat and flame. 24 to 48 hours prior to use, adjust the storage temperature to 70-85°F to facilitate handling.

SURFACE PREPARATION- STEEL

The following recommendations generally apply to the proper surface preparation of steel for Primer 205 UV but consult the data sheet of the Blome overcoat material for any additional or superseding requirements for surface preparation.

1. Steel substrate must be free of all oil, grease, dirt, dust, mill scale, rust, existing coatings and other contamination.
2. All welds must be smooth and continuous. All weld splatter, buckshot, laminations, and slivers must be removed and ground smooth.
3. Undercuts and pinholes must be filled with weld metal and ground smooth.
4. Abrasive blast in accordance with SSPC-SP 5 White Metal Blast Finish (NACE No. 1) and 3-mil dense, sharp anchor profile.

SURFACE PREPARATION-CONCRETE

The following recommendations generally apply to the proper surface preparation of concrete for Primer 205 UV but consult the data sheet of the Blome overcoat material for any additional or superseding requirements for surface preparation.

1. Concrete should be adequately cured, possess adequate integrity and not be expelling excess water of hydration. A rule of thumb for cure of new concrete is 28 days cure at 70°F but that is not an assurance that the concrete has achieved adequate physical properties.
2. Concrete should exhibit a compressive strength of 3,000 psi minimum and tensile strength of 300 psi or higher. Ground slabs and new concrete should be tested for excess moisture in accordance with ASTM D 4263 Plastic Sheet Test Method; any water on the backside of the sheet after overnight exposure is an unacceptable surface for coating.
3. We recommend utilization of a low water-cement ratio, preferably 0.38, and adequate superplasticizers for placement is recommended, particularly when cure time to coat is critical.

4. New concrete must also be free of curing compounds, form release agents and any other contamination that might inhibit adhesion.
5. Old concrete must be free of existing coatings or toppings and any loose or unsound concrete must be removed.
6. All concrete must be cleaned, as necessary, in accordance with ASTM D 4258. The resultant surface should be free of all oil, grease, and other contamination. Consult Blome International for special procedures for oil contaminated surfaces.
7. Upon completion of cleaning, the concrete surface shall be prepared in accordance with ASTM D4259. The resultant surface should be free of laitance and efflorescence and have a surface texture similar to medium (60-80) grit sandpaper.
8. Concrete must be dry prior to application of Primer 205 UV. Consult Blome International for applications over damp substrates.

MASKING & PROTECTION

Mask or remove adjacent surfaces and equipment that are not to be lined and all termination points.

APPLICATION EQUIPMENT

Primer 205 UV may be easily applied by brush, roller or spray. Since brush application is often for small areas or touchup, disposable china bristle brushes are recommended. Roller covers should be phenolic core roller suitable for solvent based coatings and the nap thickness should reflect the texture of the substrate. Blome205 may also be applied by spray using airless spray equipment. A 30 to 1 ratio pump, 3/8" ID material line and a Graco Silver Gun are suggested.

MIXING TECHNIQUE

We recommend using Jiffy type mixers for all mixing and stirring. When operating the mixer, avoid plunging it up and down in the bucket. This can fold air into the resin, which may cause bubbles to form in the coating after it has been applied. Be careful not to allow water to enter the mix.

WORKING TIME

The working time for Primer 205 UV is 20-25 minutes at 70°F in 1-gallon kits. Working time will be longer for cooler temperatures and will be much shorter at higher temperatures. Larger kit sizes will also reduce working time.

MIXING & APPLICATION

1. Add the Catalyst to the Resin and thoroughly mix for 2-3 minutes. Uniform mixing is critical to uniform curing of the applied film.
2. Apply Primer 205 UV at a uniform thickness using the application method of choice. If applying by spray to concrete surfaces, backroll to ensure adequate wetting of the substrate.
3. Remove any excess primer and ensure that no resin puddling is present.
4. Allow primer to cure hard or overnight before applying topcoat. Do not apply topcoat over Primer 205 UV while primer is still tacky.

TOUCH-UP & RECOATING

Primer 205 UV may be recoated with itself or top-coated without special surface preparation within 48 hours. Beyond 48 hours, light sanding to de-gloss is recommended before re-priming or top-coating.

CLEAN-UP

Before Primer 205 UV gels, it can be cleaned from hand tools and equipment using MEK or acetone. Spray equipment should be flushed periodically and at days end with solvent to avoid gelling in the equipment and hoses. Follow the equipment manufacturer's recommendations for proper cleaning and care instructions. After Primer 205 UV gels, stronger solvents will be required for cleaning. Use chlorinated solvents if flammable solvents are not allowed.

CAUTION

Primer 205 UV Resin and Catalyst and mixes of them present various health hazards if handled improperly. Read and abide by the safety label on each unit and refer to the Safety Data Sheets for specific hazards.

WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANT ABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.

Revised: August 9, 2017
Supersedes: March 1, 2001