PPG FLOORING 912 LV Epoxy Primer

Formerly known as Milamar ICO Primer LV

DESCRIPTION

100% solids, low viscosity penetrating epoxy primer/sealer that can be applied to dry or partially damp surfaces

PRINCIPAL CHARACTERISTICS

- 100% solids
- Low viscosity
- Low odor
- Seals concrete surfaces, helping to eliminate outgassing
- Bonds to dry and damp concrete, masonry, metal and wood
- Roller, squeegee or brush application
- Helps reduce the effects of moisture vapor transmissions
- Compliant with USDA Incidental Food Contact Requirements
- TYPICAL USES:
- Self-priming floor toppings and coatings
- Penetrating primer/sealer for concrete walls and floors

COLOR AND GLOSS LEVEL

- Clear

BASIC DATA AT 70°F (21°C)

Data for mixed product	
Number of components	Two
Mass density	9.2 lb/US gal (1.1 kg/l)
Volume solids	100%
VOC (Supplied)	EPA Method 24: 0.2 lb/US gal (22.7 g/l)
Recommended dry film thickness	6.0 - 10.0 mils (150 - 250 µm) per coat
Theoretical spreading rate	250 ft^2/US gal for 6.0 mils (6.1 m^2/l for 152 µm)
Dry to touch	10 hours
Overcoating Interval	Minimum: Coating should no longer leave residue when touched with a gloved finger Maximum: 18 hours
Curing time	18 hours
Full cure after	7 days
Shelf life	Part A: at least 12 months when stored cool and dry Part B: at least 12 months when stored cool and dry

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Notes:

- Listed data for mixed product using standard hardener.
- Curing time reflects ready for service time
- To expand the recoat time, broadcast an aggregate into primer
- Apply at approximately 200-250 ft^2/US gallon, depending on surface porosity

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Concrete

- Surface must be clean, uniform, sound, and free from contamination (such as oil, grease, rust, scale, or deposits)
- All surfaces to be covered should be power washed, shot blasted, acid etched, scarified or sanded to present a clean, sound substrate
- Concrete pH must be 7.0 or higher
- New concrete must cure a minimum of 28 days prior to application of this product

Other Substrates

- Check with PPG PMC Technical Service for preparation instructions for substrates other than concrete.

SYSTEM SPECIFICATION

- Helps block vapor transmissions at the following DFTs, per ASTM F1869:
- At one coat of 6 mil (152 µm): 5 lb/1000 ft^2/24 hr (204 g/1000 m^2/24 hr)
- At one coat of 10 mil (254 µm): 10 lb/1000 ft^2/24 hr (408 g/1000 m^2/24 hr)
- At two coats of 10 mil (254 µm) each: 20 lb/1000 ft^2/24 hr (816 g/1000 m^2/24 hr)

INSTRUCTIONS FOR USE

Mixing ratio

- Before mixing, ensure that the surface is completely prepared and ready and that all tools and equipment are handy
- Mix components according to the prescribed ratio
- Mix Part A and Part B together using a low speed Jiffy-type mixer for 2 minutes
- Do not add solvents; product is a 100% solids epoxy
- With standard hardener, Mixing Ratio by Volume: Part A to Part B 77:23 (3.44:1)
- With fast cure (FC) hardener, Mixing Ratio by Volume: Part A to Part B 82:18 (4.63:1)
- With extra fast cure (XFC) hardener, Mixing Ratio by Volume: Part A to Part B 71:29 (2.5:1)
- For recommended application instructions, see working procedure

Note:

- CAUTION: Product reacts quickly; pour all contents out of container and spread with squeegee immediately after mixing, especially at temperatures greater than 70°F (21°C)

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Application

- Immediately after mixing, pour the mixture onto the floor in a continuous ribbon and spread with a squeegee
- Completely empty mixed material from pail onto the floor before moving on to the next step
- Be sure to work the primer into any porous surfaces
- Back roll with 3/8" (9.5 mm) nap roller
- Re-prime any dry appearing areas
- Must be tack-free before overcoating
- Re-priming may be necessary if pinholes or porous spots appear
- Do not apply at a thickness of greater than 15 mils (381 µm) per pass.
- Product working time is 85 minutes at 70°F (21°C).
- Product working time is 85 minutes at 50°F (10°C).
- Product working time is 50 minutes at 90°F (32°C)

Note:

- Working time varies with temperature.

Pot life

25 minutes at 21°C (70°F)

Notes:

- The pot life will vary substantially with temperature
- See ADDITIONAL DATA – Pot life

Brush/roller

- Apply mixed material with squeegee, brush or roller
- Apply at approximately 200-250 ft^2/gal (4.9-6.1 m^2/l), depending on surface porosity
- Re-prime any areas that appear dry

Recommended thinner

No thinner should be added

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ADDITIONAL DATA

Pot life for product with fast cure (fc) hardener

- Pot Life is 9 minutes at 70°F (21°C).
- Pot Life is 10 minutes at 50°F (10°C).
- Pot Life is 9 minutes at 90°F (32°C).

Working time for product with fast cure (fc) hardener

- Working time is 10 minutes at 90°F (32°C).
- Working time is 30 minutes at 50°F (10°C).
- Working time is 30 minutes at 70°F (21°C).

Pot life for product with extra fast cure (XFC) hardener

- Pot Life is 20 minutes at 40°F (4°C).
- Pot Life is 15 minutes at 50°F (10°C).

Working time for product with extra fast cure (xfc) hardener

- Working time is 22 minutes at 40°F (4°C).
- Working time is 18 minutes at 50°F (10°C).

Time between recoats at 70°F (21°C)

- Extra fast cure (XFC) hardener: 8 hours
- Fast cure (FC) hardener: 10 hours
- Standard hardener: 18 hours

Curing time with extra fast cure (XFC) hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
40°F (4°C)	36 hours	36 hours
50°F (10°C)	10 hours	25 hours

Curing time with fast cure (FC) hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
50°F (10°C)	18 hours	30 hours
70°F (21°C)	5 hours	9 hours
90°F (32°C)	2 hours	4 hours

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Curing time with standard hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
50°F (10°C)	40 hours	3 days
70°F (21°C)	10 hours	18 hours
90°F (32°C)	5 hours	9 hours

Note:

- Maximum hardness achieved after 7 days @ 77°F (25°C)

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
50°F (10°C)	35 minutes
70°F (21°C)	25 minutes
90°F (32°C)	15 minutes

Note:

- Listed data is for product with standard hardener.

Product Qualifications

- Compliant with USDA Incidental Food Contact Requirements

DISCLAIMER

- PPG Protective & Marine Coatings does not accept any responsibility or liability for any odor, taste or contamination imparted to the drinking water from the coatings or products retained in the coating

SAFETY PRECAUTIONS

- FAILURE TO IMMEDIATELY DIESPENSE ALL PRODUCT FROM CONTAINER CAN RESULT IN PRODUCT BECOMING EXTREMELY HOT OR EVEN COMBUSTING
- Read all label and Safety Data Sheet (SDS) information prior to use

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

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REFERENCES

- Information sheet | Explanation of product data sheets

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

PMC Product Management Team

September 5, 2024

TECHNICAL BULLETIN – PPG Flooring™ 912 LV

THIS PRODUCT CARRIES A RISK OF SPONTANEOUS COMBUSTION. REVIEW THIS DOCUMENT CAREFULLY AND FOLLOW ALL GUIDANCE PRIOR TO PRODUCT USE.

PPG Flooring 912 LV is a fast reacting, 100% solids epoxy floor primer/sealer. Several cure options are available to suit specific application needs. Pot life and working time are varied depending on the cure used and may be reduced to just several minutes. Warm ambient temperatures will also speed up the reaction. Due to these properties, exotherms and potential for spontaneous combustion are imminent for volume of mixed product that is left in the bucket. Product must be poured out completely and applied immediately after mixing to avoid risk of exothermic reactions and spontaneous combustion.

This document is intended as a general guide to the safe use of *PPG Flooring* 912 LV epoxy primer/sealer. Recommendations in this guide should be followed. Before application, consult safety data sheets, product data sheets and **product labels, including the following warning statement included on the PPG Flooring 912 LV product label:**

Ventilation

As a significant amount of exposure can be from airborne materials in the form of fumes, vapors, and dusts, it is important that a good level of ventilation is maintained. The level of ventilation depends upon the task being undertaken and may vary from general background, as in a well aired workshop, to specialized facilities to provide general and / or local exhaust ventilation through forced extraction systems. If workplace conditions are such that it is difficult to achieve a good level of ventilation, then respiratory protection is an option. Depending on conditions, air-purifying respiratory protection equipped with appropriate chemical and particulate filter cartridges, or air-supplied respiratory protection may be selected.

Exotherms

An exotherm is an uncontrollable reaction between a solvent-free resin and hardener, which happens when the heat generated by the resin-hardener reaction cannot escape readily. The trapped heat accelerates the reaction that in turn generates more heat and further accelerates the reaction until it becomes uncontrollable and may

combust. This normally happens only in bulk mixes, as mixed resin applied to a job is usually in a thin film from which heat readily escapes. Causes of exotherm are usually a combination of the following circumstances:

• Mixing a large volume of resin / hardener and not pouring and applying the material fast enough.

• Not using the mixed materials quickly enough, particularly if it is a 'fast' resin / hardener system

• Higher than normal ambient temperature, or components and / or mixed material left in direct sunlight.

The appropriate methods of working should be used to reduce the likelihood of exotherm or spontaneous combustion. If an exothermic reaction between the resin and hardener occurs, then the container should be removed immediately from the workshop if safe to do so. The best way to deal with an exotherm is to immerse it in water, which cools it and reduces the volume of fumes produced. The fumes are noxious: do not inhale. To extinguish burning epoxy material the correct media is Carbon Dioxide, Dry Powder, Foam, or water fog. Do not use a full water jet.

First Aid

Eye Contact:
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention. (Remove dried or cured epoxy with denatured alcohol. Follow up by washing with soap and water, then applying skin cream. Skin showing evidence of burn should be washed thoroughly in cold water, covered with a dry dressing and the employee referred to a doctor.) This statement is from Wolverine, but I thought it was relevant for the mixed product.

Inhalation:
Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin Contact:
Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion:
If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

PPE

Hygiene Measures:
Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection:
Chemical splash goggles and face shield.

Hand Protection:
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their

protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Gloves: Nitrile / Neoprene for application. Have heat resistant gloves on hand in case of an exotherm reaction in the bucket.

Body Protection:
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection:
Use an air-fed respirator unless a site-specific assessment determines that an air-fed respirator is not necessary, in which case the results of the risk assessment should be utilized to determine whether respiratory protection is necessary and what type of protection is appropriate. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. The respiratory protection shall be in accordance to 29 CFR 1910.134.

Training

The safe use and handling of epoxy resin systems require that all employees who work with these systems must be trained in safe handling procedures. The training program should address at a minimum the following items:

- Labels, Safety Data Sheets, and Technical Data Sheets
- Health and Safety Hazards
- Emergency Procedures
- First Aid
- Workplace Controls
- Personal Protective Equipment
- Safe Handling Procedures

The applicator assumes all responsibility for the selection of PPG Flooring products, for exercising appropriate safety measures in the application of any such products, for the suitability of such products for any application including the durability and safety of any such product.

PMC Product Management Team

Disclaimer

This Document does not purport to address all applicability and safety concerns, if any, associated with its use. It is the responsibility of the user to determine applicability of the information and to establish appropriate safety practices.

Warranty

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

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