

# PPG Flooring™ 688 Polyaspartic

Formerly known as Milamar PM 880 Polyaspartic

## DESCRIPTION

Two-component, aliphatic polyurea/polyaspartic floor coating

## PRINCIPAL CHARACTERISTICS

- Excellent gloss retention
- Very good chemical resistance
- Excellent abrasion and impact resistance
- Fully resistant to common automotive and aviation fluids, salt and chemical deicers
- Can be mixed with various aggregates to create decorative floors or slip resistance
- Color stable and excellent UV weathering resistance
- TYPICAL USES:
- Industrial and commercial areas
- Finish coat for an epoxy mortar or broadcast overlay

### Notes:

- Information Sheet available with test and certification data
- This product was previously sold as as Milamar PM 880

## COLOR AND GLOSS LEVEL

- Clear
- Also available in gray, dark gray, beige, and yellow
- High gloss

## BASIC DATA AT 75°F (24°C)

Data for mixed product	
Number of components	Two
Mass density	8.9 lb/US gal (1.1 kg/l)
Volume solids	92 ± 2%
VOC (Supplied)	EPA Method 24: 0.7 lb/US gal (84.3 g/l)
Recommended dry film thickness	10.0 - 16.0 mils (250 - 400 µm) per coat
Dry to touch	2 hours
Dry to walk on	6 hours



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## Data for mixed product

<b>Full cure after</b>	3 days
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### Notes:

- Recommended dry film thickness dependent on substrate and service conditions
- Do not exceed 20.0 mils (500 µm) wet film thickness (WFT)
- Dry to walk on is 18 hours at 40°F (4°C)
- Full cure after reflects maximum chemical resistance at 75°F (24°C)
- See ADDITIONAL DATA – Curing time
- The shelf life for the unmixed components (Part A and Part B) for this product is 6 months at 70°F (21°C).
- Material should be stored in dry conditions, out of direct sunlight, and in unopened original factory containers.

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Concrete

- All surfaces must be sound, dry, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances
- New concrete must cure a minimum of 28 days prior to application
- Prepare in accordance with SSPC SP-13 guidelines

### Substrate temperature and application conditions

- Ambient temperature during application and curing should be between 40°F (4°C) and 90°F (32°C)
- Substrate temperature during application and curing should be at least 5°F (3°C) above dew point
- Do not apply over damp substrate

## SYSTEM SPECIFICATION

### Chemical Resistance (Splash/Spill)

- Bleach
- Citric Acid
- Corn Syrup
- Jet Fuel
- Kerosene
- Mineral Spirits
- 30% Phosphoric Acid
- 10% Sulfuric Acid
- 30% Sulfuric Acid
- 50% Sulfuric Acid

### Notes:

- A more complete list of chemical resistances is available by request from PPG PMC Technical Services
- To maximize service life, chemical splash and spills should be cleaned promptly
- Some discoloration may occur after prolonged contact with certain chemicals, though the coating integrity will remain intact.



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## INSTRUCTIONS FOR USE

- Recommended primer for concrete: PPG Flooring 912 LV (formerly known as Milamar ICO Primer LV). Refer to Technical Data Sheet

### Mixing ratio

- For clear product, Mixing Ratio by Volume: Part A to Part B 2.6:1
- For pigmented product, Mixing Ratio by Volume: Part A to Part B 2.7:1
- Mix Part A and Part B together using a low speed Jiffy-type mixer for at least 60 seconds
- If pigmented, pre-mix Part A for 30 seconds
- Properly mixed material will be a uniform color without light or dark spots
- Apply immediately after mixing

### Pot life

20 minutes at 75°F (24°C)

Note: See ADDITIONAL DATA – Pot life

### Application

- On concrete surfaces, first apply PPG Flooring 912 LV primer and allow to dry tack free.
- Immediately after mixing, pour the mixture onto the floor in a ribbon pattern and spread with a notched rubber squeegee
- Back roll to ensure proper coverage and absorption
- Product working time is 15 minutes at 75°F (24°C)
- Product working time is 20 minutes at 40°F (4°C)

## ADDITIONAL DATA

### Curing Time (Dry to Walk On)

- 18 hours at 40°F (4.4°C)
- 6 hours at 75°F (24°C)

Curing time for DFT up to 10.0 mils (250 µm)	
Substrate temperature	Dry to touch
40°F (4°C)	4.5 hours
75°F (24°C)	2 hours

Note: Longer drying times may be necessary at higher DFT and under unfavorable atmospheric conditions

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Pot life (at application viscosity)	
Mixed product temperature	Pot life
40°F (4°C)	30 minutes
75°F (24°C)	20 minutes

Physical data of cured material	
Characteristic	Value
Tensile Strength (ASTM D638)	400 psi (2.8 MPa)
Tensile Elongation (ASTM D638)	85%
Adhesion to Concrete (ASTM D4541)	To concrete failure
Hardness, Shore D (ASTM D2240)	90 psi (0.62 MPa)
Taber Abrasion (ASTM D4060, CS-17 Wheel, 1 kg load, 1,000 cycles)	80 mg loss

Note: The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

## DISCLAIMER

- For industrial or professional use only
- 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
- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your distributor for specific instructions and in order to make sure that the product performance can be safeguarded.

## SAFETY PRECAUTIONS

- Read all label and Safety Data Sheet (SDS) information prior to use

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and 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

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SURFACE PREPARATION OF CONCRETE (FLOORS)	INFORMATION SHEET	1496

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