PPG Flooring™ 980 Water Clear Epoxy

formerly known as Milamar PM100 Series

DESCRIPTION

Water clear, moisture insensitive multipurpose epoxy floor coating.

PRINCIPAL CHARACTERISTICS

- 100% solids
- Clear, low-ambering epoxy
- Available in multiple cure rates
- Versatile, can be used in multiple applications
- Excellent abrasion and impact resistance
- Very good chemical resistance
- Low odor
- Moisture tolerant epoxy
- TYPICAL USES:
- Clear finish for decorative and architectural applications
- Primer, mortar, or self-leveling coating in industrial and commercial applications

COLOR AND GLOSS LEVEL

- Clear
- High gloss

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Mass density	9.2 lb/US gal (1.1 kg/l)
Volume solids	100 ± 2%
VOC (Supplied)	EPA Method 24: 0.1 lb/US gal (6.8 g/l)
Theoretical spreading rate	200 ft^2/US gal for 8.0 mils (4.9 m^2/l for 203 µm)
Dry to touch	10 hours
Dry to walk on	24 hours
Overcoating Interval	Maximum: 24 hours Minimum: Coating should no longer leave residue when touched with a gloved finger
Curing time	36 hours
Full cure after	7 days
Shelf life	Base: at least 12 months Hardener: at least 12 months

Notes:

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- Curing time reflects ready for service time
- Material should be stored in dry conditions, out of direct sunlight, in unopened original factory containers, at temperatures above 50°F (10°C) and below 90°C (32°C)
- If overcoat time is exceeded, abrade and clean surface before recoating
- Listed data for mixed product using standard hardener.

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Moisture vapor transmission should not exceed 5 lb/1000 ft^2 (24.4 g/m^2) over 24 hours

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 of this product
- Prepare in accordance with SSPC SP-13 guidelines
- Ambient temperature should be at least 50°F (10°C) during application
- Ambient temperature should be at least 3°F (5°C) above dew point during application

SYSTEM SPECIFICATION

- Avoid applications where ambient operating temperatures exceed 170°F (77°C).

Chemical resistance (splash/spill)

- Ammonium Hydroxide 28%
- Bleach
- Ethylene Glycol
- Gasoline
- Isopropyl Alcohol 98%
- Mineral Spirits
- Sulfuric Acid 45%
- Sodium Hydroxide 30%

Notes:

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

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INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 2:1

- Before mixing, ensure that the surface is completely prepared and ready and that all tools and equipment are handy
- 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

Application

- Pour entire mix onto floor in a continuous ribbon. Level the mixture with a flat squeegee or trowel, then back roll with medium nap phenolic core roller
- If a slip resistant finish is required, lightly and evenly broadcast aggregate into first coat after back rolling but before product begins to set
- Working time is 30 minutes at 75°F (23.9°C)
- Completely empty mixed material from pail onto the floor before moving on to the next step

Note:

- Indicated working time is for product with standard hardener. See ADDITIONAL DATA for other working times.

Pot life

20 minutes at 75°F (24°C)

Note:

- Indicated pot life is for product with standard hardener

ADDITIONAL DATA

Working time for product with fast cure (FC) hardener

- Working time is 10 minutes at 75° (23.9°C)

Pot life for product with fast cure (fc) hardener

- Pot life is 8-10 minutes at 75°F (23.9°C)

Working time for product with rapid cure (RPD) hardener

- Working time is 20 minutes at 75° (23.9°C)

Pot life for product with rapid cure (RPD) hardener

- Pot life is 10-15 minutes at 75°F (23.9°C)

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Physical data of cured material	
Characteristic	**Value**
Compressive strength (ASTM C579)	> 12,000 psi (>82.7 MPA)
Tensile Strength (ASTM D638)	5,992 psi (41.3 MPa)
Tensile Elongation (ASTM D638)	14%
Flexural Strength (ASTM C580)	7,127 psi (49.1 MPa)
Adhesion to Concrete (ASTM D4541)	>300 psi (>2.1 MPa)
Linear Shrinkage (ASTM C883)	None
Hardness, Shore D (ASTM D2240)	82-85
Water Absorption (ASTM C413)	<0.01%
Abrasion resistance (ASTM D4060)	70 mg loss
Indentation (MIL-D-3134F)	0.003 in (0.076 mm)

Note:

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

Drying time with standard hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
75°F (24°C)	10 hours	36 hours

Note:

- Provides best clarity for use as top coat.

Drying time with rapid cure (RPD) hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
75°F (24°C)	7 hours	24 hours

Note:

- Can be used as top coat.

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Drying time with fast cure (FC) hardener		
Substrate temperature	**Dry to touch**	**Dry to service**
75°F (24°C)	3 hours	24 hours

Notes:

- Not recommended for use as top coat.
- Primarily intended for use in colder temperatures (50° (10°C) minimum) and fast applications of double broadcast systems.

DISCLAIMER

- For industrial or professional use only
- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your PMC representative 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 & 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.

REFERENCES

- Information sheet | Explanation of product data sheets

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