

PPG FLOORING 688 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 de-icers
- 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

COLOR AND GLOSS LEVEL

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

BASIC DATA AT 20°C (68°F)

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
Full cure after	3 days

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



PPG FLOORING 688 POLYASPARTIC

SYSTEM SPECIFICATION

Chemical resistance (splash/spill)

- Bleach
 - Citric Acid
 - Corn Syrup
 - Jet Fuel
 - Kerosene
 - 30% Phosphoric Acid
 - A complete list of chemical resistances is available upon request.
 - 30% Sulfuric Acid
 - 50% Sulfuric Acid
 - Mineral Spirits
-

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
-

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)
-

PPG FLOORING 688 POLYASPARTIC

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)	400 psi (2.8 MPa)*
Hardness, Shore A (ASTM D2240)	90
Taber Abrasion (ASTM D1044, CS-17 Wheel, 1 kg load, 1000 cycles)	80 mg

Notes:

- 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.
- * note: adhesion testing led to substrate failure before coating bond loss

Curing Time	
Substrate temperature	Dry to walk on
40°F (4°C)	16 hours
75°F (24°C)	6 hours

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

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

SAFETY PRECAUTIONS

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

PPG FLOORING 688 POLYASPARTIC

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

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.