PPG Flooring 670 Aliphatic Clearcoat

formerly known as Aliphatic Clearcoat Plus

DESCRIPTION

Two-component, highly abrasion-resistant, aliphatic polyurea coating for industrial applications

PRINCIPAL CHARACTERISTICS

- High solids
- Excellent abrasion resistance
- Can be applied to concrete, steel, wood and plastic substrates
- Color stable and excellent UV weathering resistance
- Can be applied and cures at temperatures down to -20°F (-29°C).
- TYPICAL USES:
- Interior or Exterior Usage
- May be topcoated on polyurea, polyurethane or epoxy
- Suitable for OEM with smooth leveling and high gloss
- Flake and quartz broadcast systems

COLOR AND GLOSS LEVEL

- Clear or pigmented
- White is standard color when pigmented
- High gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	9.1 lb/US gal (1.1 kg/l)
Volume solids	100 ± 2%
VOC (Supplied)	EPA Method 24: 0.0 lb/US gal (4.4 g/l)
Recommended dry film thickness	10.0 - 16.0 mils (250 - 400 µm) per coat
Theoretical spreading rate	160 ft^2/US gal for 10.0 mils (3.9 m^2/l for 254 µm) 100 ft^2/US gal for 16.0 mils (2.5 m^2/l for 406 µm)
Dry to touch	2 hours
Dry to overcoat	2 hours
Overcoating Interval	Minimum: 2 hours Maximum: 4 hours
Curing time	3 hours
Full cure after	7 days

Notes:

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- If overcoat time is exceeded, abrade and clean surface before recoating. Then treat with VF Tie Coat or SPI Prep Wipe as a reactivating adhesion promoter
- Curing time reflects when ready for light traffic.
- The shelf life for each of the unmixed components (Part A and Part B) for this product is 12 months at 70°F (21°C)
- Material should be stored in dry conditions, out of direct sunlight, and in unopened original factory containers, at temperatures above 60°F (16°C) and below 95°F (35°C)

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Check for soluble salts on surfaces to be coated.
- Maximum allowable soluble salt level, chlorides: 3 µg/cm^2 (immersion), 7 µg/cm^2 (non-immersion)
- Maximum allowable soluble salt level, nitrates: 5 µg/cm^2 (immersion), 10 µg/cm^2 (non-immersion)
- Maximum allowable soluble salt level, sulfates: 10 µg/cm^2 (immersion), 20 µg/cm^2 (non-immersion)
- If amount of soluble salts exceeds recommended limits, treat with a liquid soluble salt remover until acceptable limits are reached

Metal

- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-10 cleanliness or higher. Achieve a surface profile of 2.0 - 3.0 mils (50 - 76 µm) or higher
- Ensure surface is dust free after blasting
- An acetone wash can be used to flash dry the surface

Concrete

- All surfaces must be sound, dry, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances
- Abrade surface to achieve a surface profile equivalent to CSP 3 to CSP 5 in accordance with ICRI 310.2R-2013
- Prepare in accordance with SSPC SP-13 guidelines
- Maximum moisture content of 3 lb / 1,000 ft^2/24 hours per ASTM F1869
- Moisture content should not exceed 5%

Substrate temperature and application conditions

- Substrate temperature during application and curing should be above -7°C (20°F) Note: Do not install over damp, wet or saturated substrates

SYSTEM SPECIFICATION

- Product is self priming and typically does not require an additional priming coat. In cases where primers are required, please use the recommended primers below.
- Primers for concrete (optional): PPG RAVEN® 175 Primer, PPG RAVEN® 171FS Primer, PPG VF15 Primer, or PPG VF20 Primer
- Moisture mitigating primers for concrete slabs: PPG Flooring 912 LV primer or PPG RAVEN® 175 primer
- Primer for metal surfaces: PPG AQUATAPOXY® 190 Primer

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INSTRUCTIONS FOR USE

Mixing ratio by volume: Part A to Part B 2:3

- Pour Part B into Part A container and thoroughly mix the two components of the kit together
- Mix Part A and Part B together using a paint paddle or low speed drill mixer, without leaving air bubbles
- Continue mixing for 3-5 minutes
- If pigment was ordered separately, add to Part B and mix thoroughly before adding to Part A
- Properly mixed material will be a uniform color without light or dark spots
- For recommended application instructions, see working procedure

Note:

- Optional: Add 5-15% acetone by volume to the mixed Parts A&B to obtain stated pot life

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Application

- Can be applied using floor coaters, roller, airless spray, cup gun or pressure pot
- If a non-slip surface is desired, apply a 10 mil coat of product and then broadcast with aggregate, as required.
- Apply second coat over aggregate within four hours.

Airless spray

- 7/8 HP/min
- Use a 0.017-0.021 in (0.43-0.53 mm) spray tip

Brush/roller

- Use a lint-free 1/4 or 3/8 in (6.4 - 9.5 mm) nap depending on surface texture

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Cleaning procedure

- Use disposable plastic tools and buckets wherever possible. Cured material may be stripped or peeled from plastic tools and containers
- Steel mixers or other metal tools are more difficult to clean. They may need to be soaked in a solvent such as MEK to soften and peel cured material

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ADDITIONAL DATA

Physical data of cured material	
Characteristic	**Value**
Hardness, Shore D (ASTM D2240)	68
Tensile Strength (ASTM D638)	5945 psi (41.0 MPa)
Tensile Elongation (ASTM D638)	4%

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Physical data of cured material	
Taber Abrasion (ASTM D4060, CS-17 Wheel, 1 kg load, 1,000 cycles)	20 mg
Tear Strength (Die C, ASTM D624)	460 pli

Product Qualifications

- Compliant with USDA Incidental Food Contact Requirements

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 distributor or PPG representative for specific instructions and in order to make sure that the product performance can be safeguarded.
- 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

- 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

WARRANTY

LIMITATIONS OF LIABILITY

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