



DF PU 16C

Clear Decorative PU for Floors

Pack Size
10.1Kgs

TDS
Technical Data Sheet



Product Description

DF PU 16C is a high-performance, two-component aliphatic polyurethane coating designed for decorative floor applications. This water-based, zero-VOC, odorless coating provides excellent protection against harsh weather conditions, UV exposure, and physical damage, while offering elastomeric properties. DF PU 16C acts as a breathable waterproof barrier and can be applied using spray, brush, or roller methods. The unique water-based formulation ensures environmental safety while delivering strong chemical resistance, UV protection, and abrasion resistance.

Recommended Uses

- Running tracks
- Polyurethane floors
- Acrylic floors
- Warehouses
- Food and beverage facilities
- Commercial vehicles
- Airports
- Stadiums
- Sound walls
- Direct-to-metal applications
- Warehouse floors
- Garage floors
- Tile floors and walls

Features & Benefits

Scratch-resistant

Non-yellowing and UV-resistant topcoat

Anti-carbonation protection

Suitable for direct application on metal and concrete

Chemical and acid resistance

Excellent as a protective floor coating or topcoat, providing a high-gloss, chemical- and acid-resistant finish for industrial concrete floors

Breathable elastomeric waterproofing properties

Surface Preparation

Ensure all surfaces are clean and dry, free from oils, dirt, debris, and minerals such as efflorescence, lime, and calcium. These

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July 2024, Version 01.001

efflorescence, lime, and calcium. These contaminants can prevent proper penetration of DF PU 16C and compromise the coating's longevity. It is recommended to use DF PU 16C Concrete and Masonry Cleaner for pretreatment. Once cleaned, allow the surface to dry fully before applying the coating.

Mixing Instructions

1. Stir Part A for 2 minutes using a jiffy blade at a slow speed (500 RPM) to fully disperse the product.
2. Pour Part B into Part A and mix for 2-3 minutes.
3. Transfer a portion of the mixed product back into the Part B container, mix for 30 seconds, and then return it to Part A. Mix again for 2-3 minutes. Let the product stand for 5 minutes before application. Loosely cover the mixed product. Do not reseal the mixed product.

Application Instructions

Smooth Surfaces

DF PU 16C can be applied directly over most surfaces without a primer. Apply a light coat at a thickness of 3 to 4 wet mils.

Porous Surfaces

For porous surfaces, a sealer or filler should be used to eliminate potential pinholes before applying DF PU 16C. Apply one coat at 3-4 mils wet per coat. Allow 4 hours between coats or until the coating is tack-free. Any runs should be brushed or rolled out immediately. For heavy-duty applications such as warehouse floors with forklift traffic, a dry film thickness (DFT) of 3-4 mils is recommended. Dry time is typically 1-2 hours at 75°F.

Re-Application

Apply a second coat within 48 hours to ensure proper adhesion. If the first coat has dried for longer than 48 hours, abrade the surface to promote adhesion before applying the second coat.

Precautions

When applying to horizontal surfaces, it is the contractor's responsibility to use a slip-resistant additive if required by project conditions. Work in a well-ventilated area and protect the work of other trades, as well as plants, automobiles, and surfaces not to be coated. Clean any spills or leaks promptly to prevent permanent staining. Do not apply DF PU 16C if the surface moisture content exceeds 25%. Ensure that air, surface, and material temperatures are above 40°F (4.4°C) and at least 5°F above the dew point before application. Do not apply at temperatures below 40°F or when temperatures are expected to drop below 40°F within 48 hours. Avoid application in high humidity (greater than 90%) or if rain, snow, or lower temperatures are expected within 48 hours.

Test Panel

Always test DF PU 16C on a mock wall or test panel before general application to determine color acceptance, surface porosity, and application rates.

Safe Handling

Use DF PU 16C only with adequate ventilation and appropriate respiratory protection. Avoid skin contact and wear protective gloves. Refer to the Safety Data Sheet for detailed safety information.

Technical Data

Solid by Weight (%):	Clear/Matte 52 (±2%)/58%
Solid by Volume (%):	50%
Dry Time:	1 - 2 hours
Cure Time:	3 - 7 days

Test Data

Flash Point:	>118°C (245°F) (Tag closed cup)
pH:	Part A: N/A, Part B: 9.2
Specific Gravity:	1.05
Gloss:	>90 @ 16°C (60°F) (Gloss meter)
Gloss Loss	: <10% (ASTM D523)
Color Loss:	<1.1% (ASTM D2244)
Salt Spray:	1500+ hours (ASTM B117)
Humidity:	1500+ hours (ASTM D2244)
Abrasion:	<40mg (ASTM D4060)
Hardness:	>2H (ASTM D3363)
Adhesion	: Pass (ASTM D2197)

Flexibility:	Pass (ASTM D2794)
Surface Burning:	Flame spread 0, Smoke development 0 (ASTM E84)
Odor:	None
VOC (g/L, less water):	0
MEK Double Rub:	Passed 2,000 cycles @ 50% solids

Chemical Resistance

DF PU 16C provides excellent resistance to a wide range of chemicals and acids, including:

- Ammonium Hydroxide
- Potassium Hydroxide
- Sodium Hydroxide
- Sodium Chloride
- Trisodium Phosphate
- Ethyl Alcohol
- Isopropyl Alcohol
- Methyl Alcohol
- Hyjet #3
- Skydrol 500 A & B
- Hydrochloric Acid 10%
- Phosphoric Acid 35%
- Sulfuric Acid 20%
- Acetic Acid 24%
- Trichlorethylene
- Perchlorethylene
- Toluene & Xylene
- Jet Fuel
- Acetone
- Cellusolve Acetate
- Butyl Cellusolve
- Beer
- Cola
- Milk
- Mustard
- Bleach

Pack Size

15Kgs



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.