

Full aliphatic polyurethane binder specially formulated for stone carpet floor application



Description

GardenDEC® AF-1K Full aliphatic Polyurethane binder. Specially formulated for stone carpet floor application which cures with the humidity in the atmosphere.

GardenDEC® AF-1K is elastic, highly hydrophobic, it does not yellow, and granules do not change color, exposed to extreme sunlight. It is based on pure elastomeric, which results in excellent resistance to mechanical, chemical, thermal, UV, continuous water contact and extreme weather conditions.

The application requires mixing 6% of the binder weight of the product with colored quartz and marble granules. If the infrastructure requires waterproofing in stone carpet applications, PoreFILLER® P-1K should be applied under the stone carpet layer.

Do not leave the packaging lid open during the application phase and the open product can be saved for the next application using the packages lid open and close method.

Important Features

- GardenDEC® AF-1K ideal for use in warm weather.
- Special formulated for summer season.
- Due to continuous water contact and rainwater, no lime or chlorine water stains occur
- Highly Hydrophobic
- Highly sunlight resistance
- Full Aliphatic

Packaging Types

4kg

10kg

20kg

Pallet Description

4kg	125pcs X 4kg	Total 500kg
10kg	60pcs X 10kg	Total 600kg
20kg	30pcs X 20kg	Total 600kg

Features / Benefits

- Transparent Full Aliphatic
- Excellent weather and UV resistance
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 200 °C
- Resistance to cold: The film remains elastic even down to -40 °C
- Excellent mechanical properties
- Outstanding resistance to chemicals
- Outstanding hydrolysis and oxidation resistance
- Absolutely non foaming
- Comfortable application

Application Areas

- Outdoor
- Car Parks and Garages
- Squares and Parks
- Areas with a lot of car traffic
- Driveways, Terraces, Pool Sides
- Paths and walkways
- Verandas and balconies
- Outdoor recreation areas
- Ideal for pathways
- Garage ramps
- Cycle paths
- Parking areas
- Pedestrian crossings
- Secondary roads

Technical Data

Potlife: ± 45 minutes (20 °C)

Touch Drying Time: ± 6 hours (25 °C)

Drying Time: 24 hours (25 °C)

Walkable After: 24 hours

Service Temperature: (-40 °C) - (+80 °C)

QUV Accelerated Weathering Test

(6hr UV, at 70 °C (UVB-Lamps) & 6hr COND at 60 °C) - Passed 4000 hours.

Consumption

- Consumption 6% Weight of the dry granules.
- The exact ratio depends on the dust content of the granules.

Application Procedure

Clean the surface using a high pressure washer if possible.

Remove oil, grease and wax contaminants. cement laitance, loose particles, mould release agents, cured membranes must also be removed. The application surface must be dry.

Priming: Priming is required when application is on non-porous substrates, such as ceramic/glazed tiles. In this case, Primer-D 1K is used.

During the floor stone carpet application;

- For a more comfortable application, spray your trowel with a mixture of 20% glass cleaning water and 80% tap water.
- Clean your trowel frequently with Cellulosic thinner during the application phase.

Technical Specifications

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	at 20 °C	900-1,200
Specific weight	gr/cm ³	at 25 °C	0.85-1.00
Solids	%	internal	80-85
Flash Point	°C	closed cup	30
Tack free time, at 77 of (25 °C) & 55% RH	hours	-	7
Recoat time	hours	-	8-24
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	200
Hardness	Shore D	-	60
Tensile strength at break at 23 °C	Kg/cm ² (N/mm ²)	-	350 (35)
Percent elongation at 23 °C	%	-	> 350
Water vapor transmission	gr/m ² .hr	Water Method	0.8
QUV Accelerated Weathering Test (6hr UV, at 70 °C (UVB-Lamps) & 6hr COND at 60 °C)	-	-	passed (4,000 hours)
Thermal resistance (100 days at 80 °C)	-	-	passed

Chemical (Hydrolysis) Resistance

Potassium Hydroxide, 8%	14 days at 50 °C	unaffected
Sodium Hypochlorite, 5%	14 days	unaffected
Water absorption	-	< 1.4%