

CONSTRUCTION CHEMICALS MANUFACTURER

# ABAFLOOR-21

SELF-LEVELING EPOXY SMOOTH INTERMEDIATE FLOORING

## DESCRIPTION

ABAFLOOR-21 is a two component intermediate layer flooring system based on epoxy resin formulation and modified polyamine hardener with very high mechanical and chemical resistance characteristics. This product is designed to be applied over concrete surfaces and in flooring operations to create a durable epoxy intermediate surface. ABAFLOOR-21 can be used to protect concrete floor surfaces in food industry, industrial and commercial warehouses, power plants and other places where the floor surface must be smooth, cleanable and ready to heavy work.

## **CHARACTERSTICS**

- High initial and final mechanical strengths
- Excellent flow ability and good self-leveling properties
- · Easy to apply
- Excellent adhesion to substrate
- High abrasion resistance and good flexibility
- Good chemical and mechanical resistance
- Can be filled with quartz sands on site
- Very good bond with subsequent intermediate and top coats

## APPLICATION

- Parking and warehouses
- Laboratories, Hospitals and Health centers
- Aircraft hangars
- Food, Beverage, Dairies and Drug Plants

## SURFACE PREPARATION

ABAFLOOR-21 must be applied over approved primer of ABAPRIME or ABAPENODUR. The primer surface should be dry and free from all contamination. ABAFLOOR-21 should be applied within the over coating intervals specified.

In order to achieve a smooth and suitable surface, all cracks in the concrete shall be filled by ABADUR MP before applying ABAFLOOR-21.

<u>Concrete Surfaces:</u> Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 4%. All surfaces should be clean and dry.





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## SURFACE PREPERATION SHALL NOT TAKE PLACE IN FOLLOWING CONDITIONS:

- At temperature below 15 °C
- When the relative humidity is greater than 80%
- When the surface temperature is less than 3 °C above the dew point

## **APPLICATION METHOD**

Material is supplied in two containers as a unit. Always mix a complete unit in the proportion supplied. Once the unit has been mixed, it must be used within the working pot life specified.

1- Agitate Part A and B separately with a power agitator.

2-Combine the entire contents of part B with Part A and mix thoroughly with power agitator. Mix thoroughly for at least three minutes, scraping the container bottom and side to assure complete mixing. There is no induction or waiting time required after mixing before application.

The exothermic nature of epoxy setting reactions may cause rapid temperature rise when the mixture is left massed in a bucket, resulting in high temperatures and loss of utility of the product. Like all high performance coating, this product must be applied as recommended to obtain the maximum protection for which this coating is formulated.

Pour ABAFLOOR-21 on the floor and spread using a flat trowel. Within 10 minutes, roll the surface with a pin roller to remove air bubbles. Applying a minimum thick of 1-2.5 mm ABAFLOOR-21 normally provides a smooth surface with very good mechanical characteristics. In hot climate, material temperature should be 20 to 25°C prior to mixing; otherwise pot life becomes very short.

- Do not thin for any reason.
- Do not apply the flooring material when wind speed is in excess of 7 m/s.
- Do not apply the flooring material when ambient temperature is below 20°C and more than 40 °C.
- Do not apply the flooring material when surface temperature is below 10°C.



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# PHYSICAL AND CHEMICAL PROPERTIES

Properties	Values		
Physical State at 20(°C)	High viscose free flowing mix		
Volume Solid	98±2		
Color	Cream (mix)		
Density (g.cm <sup>-3</sup> )	2.22±0.20		
Mixing Ratio (A:B)	150:10		
Drying Time (day)	7 (@25°C)		
Cleaner	Aromatic solvents and thinners		
Application Frequency Times (sets)	1-2		
Bond Strength @7days (MPa)	>2.5 (with concrete cohesive failure)		
Compressive Strength @7days (MPa)	~45		
Tensile Strength@7days(MPa)	~7		

## **Drying Time**

Tomporaturo(°C)	Touch dry (bro)	Over-coating (hrs.)		Full cure (days)
Temperature(°C) Touch dry (hrs.)	Min.	Max.		
+20	32	32	42	8
+30	24	24	32	6
+40	18	18	24	4

## Pot life (When the material temperature is 25°C)

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Ambient temperature(°C)	+20	+30	+40
Pot life(minutes)	~55	~45	~25

## PACKAGING

25.6 kg ready to mix units, in 2 parts (Part A: 24 kg bucket; Part B: 1.6 kg bucket)

## **STORAGE & SHELF LIFE**

The shelf life is 6 months in the original packaging if unopened, stored free from frost, moisture and direct sunlight.

The best recommended storage temperature is +15 to +30 °C.



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#### **HEALTH & SAFETY**

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This product is Flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

1-Circulate adequate fresh air continuously during application and drying.

2-Use fresh air masks and explosion proof equipment.

3- Prohibit all flames, sparks, welding and smoking.

MSDS is available at ABADGARAN website.

# **TECHNICAL SERVICE**

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

All data presented in this technical datasheet are based on our last researches in ABADGARAN CONSTRUCTION CHEMICALS laboratories and are just as a guide for choosing appropriate material. Therefore users should conduct a sufficient investigation to establish the suitability and conformity of any product for intended uses.





. صلاحیت ایران موسسه استاندارد و تحقیقات صنعتی ISO / JF تاپیدیه صلاحیت آزمایشگاه همکا

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