BASF
The Chemical Company

YAPFLEKS® 305

Masterseal® 565

Cement Based Polymer Reinforced Single Component Water Insulation Material

Description of Product

YAPFLEKS® 305 is a cement based polymer reinforced single component rigid insulation material used on concrete curtains and cement based plasters, and applied from the inside or outside against leaking and normal pressure surface waters.

Ministry of Public Works Pos. No: 04.477/2

Fields of Application

- In inner and outer areas for vertical and horizontal applications.
- In insulation of foundations.
- In supporting walls.
- In water tanks.
- In wet volumes like WC, bathroom, kitchen, and balcony.
- In small terraces.
- As water insulation material in small swimming pools and decorative pools.

Features and Benefits

- Easy to prepare and apply.
- Applied by brush, trowel or spraying machine.
- Long working time.
- Water vapor permeable.
- Non-shrinking and non-cracking.
- Resistant to freezing - thawing cycle.
- Can be safely used in drinking water tanks (has a test report).

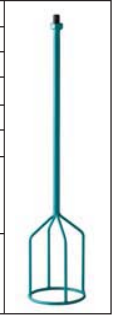
Certified by Hacettepe University Turkish Doping Control Center and Chemical Analysis Laboratory, and consistent with BS 6920 Standard Analysis Report.

Application Procedure

Preparation of Substrate

Cement based surfaces that contact with water have to be strong, dry, bearing, dustless, clean, and also in balance. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin traces

Technical Data

Structure of the Material	Mineral sealant, polymer modified admixtures and special cement	
Color	Gray	KR
Rupture Strength	≥ 1.00 N/mm²	
Resistance to Pressurized Water	≥ 0.50 bar Positive	
Application Ground Temperature	+5°C +25°C	
Service Temperature	-20°C +80°C	
Maturity Period	3 - 5 minutes	
Usage Period	2 hours (in +20°C)	
Period to Wait Before Opening to Service Mechanic Strength Water Impermeability	 2 days 7 days	
Period to Wait Before Coating Its Top By Plaster By Ceramic	 3 days 3 days	

Obtained in +23°C, 50% relative humidity conditions. Higher temperatures decrease the time, lower temperatures increase the time.

TÜV CERT DIN EN ISO 9001 Zertifikat: 01 100 012854
TÜV CERT DIN EN ISO 14001 Zertifikat: 01 104 052205
TÜV CERT OHSAS 18001 Zertifikat: 01 113 050239

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that can weaken adherence and no loose particles must be present.
Iron and wooden wedges on the surface have to be removed, and active water leakages and spaces must be filled by **Waterplug®, Polifiks®** or **Emaco® S88** C if present. Corners and sides must be beveled with minimum 4 cm radius bevels. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating material losses its water rapidly and turns dull, this means the surface is not wetted well or dried rapidly. In these instances where the weather is hot or materials are exposed to wind, mixture water can be increased for 10% just for the first layer.

Mixing

Necessary amount of water is poured into a clean mixing container with the help of a scale. **YAPFLEKS® 305** is slowly added to the container and mixed with a 400 - 600 RPM mixer at least for 3-5 minutes until a homogenous and uniform mixture is obtained. After waiting for 3-5 minutes, the mixture is mixed again for approximately 30 seconds, and becomes ready to use.

Mixing Ratios
Obtaining Rigid Coating By Mixing With Water

YAPFLEKS® 305	For 1 kg powder	For 20 kg bag
Amount of Mixture	~0,23 liters	~4,60 liters
Density of Mixture	~2,03 kg/liter	

Application Method

Prepared **YAPFLEKS® 305** mixture is applied by Thoro brush or trowel as two or three layers. Brush application direction in each layer must be perpendicular to each other. Waiting period between each layer changes depending on environmental conditions.

Coverage

Coverage of First Layer : 1.50 kg/m^2 powder product
Coverage of Second Layer: 1.30 kg/m^2 powder product
Coverage of Third Layer : 1.20 kg/m^2 powder product

Watchpoints

- If surface temperature is below +5°C or over +25°C in **YAPFLEKS® 305** application, then suitable temperatures must be waited for. Also application should not be made in very hot, rainy or windy weathers.
- In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours.
- **YAPFLEKS® 305** applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 7 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time.
- Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers.
- The surfaces that will be walked on have to be coated by **Binder® 5** grout or ceramic.
- **YAPFLEKS® 306** must be used for pools, vibrating grounds and surfaces expected to be deflected.

Cleaning of Tools

All the tools and equipments must be cleaned by water after the application. After **YAPFLEKS® 305** is hardened, it can only be removed from the surface mechanically.

Packaging

20 kg polyethylene reinforced kraft bag.

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Storage

Must be stored in unopened original packing, and in cool and dry environment protected from freezing. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages have to be stored by tightly sealing the bag, and must be used in one week.

Health and Safety Precautions

Work cloth, protective gloves, goggles and masks concordant with Work and Worker Health rules must be used during the application. Due to irritant effects of the non-cured material, avoid contact to skin and eyes during storing and application. If such a contact occurs, it must be washed by soap and plenty of water. Consult a physician urgently if swallowed. Food and drink must be kept outside the application areas. Must be stored away from children. Please look at the Material Safety Data Sheet for detailed information.

Disclaimer

This information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, BASF Yapı Kimyasalları San. A.S. is only responsible from the quality of the product. BASF Yapı Kimyasalları San. A.S. cannot be hold responsible from the results caused by applications of the product not in accordance with the written suggestions of how and where to use the product and/or faulty applications. This technical document is valid until a new one is printed and abates the previous editions. 01/2008