



The Chemical Company

KANADICHT®

Masterseal® 563

Sulphate-Resistant Cement Based Polymer Reinforced Single Component Water Insulation Material Used in Domestic Wastewater Structures

Description of Product

KANADICHT® is a sulfate-resistant cement based polymer reinforced single component water insulation material that is resistant to chemicals in domestic wastewaters and mechanic effects, and that is applied on concrete and cement based plasters from the inside or outside.

Fields of Application

- In inner and outer areas for vertical and horizontal applications from the direction of coming water.
- In domestic wastewater structures where depth is lower than 15 m, as impermeable last layer coating on surfaces repaired by **Emaco® S88 C**.
- For protecting top surfaces of channels and making a sealed coating.
- In domestic wastewater structures and coating of reinforced concrete pipes.

- For protecting wastewater channels and pipes against sulfate attacks.
- In rainwater and wastewater tanks.

Features and Benefits

- RESISTANT TO SULFATE.
- Easy to prepare and apply.
- Long working time.
- High mechanic resistance.
- Vapor permeable.
- Non-shrinking and non-cracking.
- Applied by brush, trowel or spraying method.
- Can contact with domestic wastewater and rainwater continuously.
- 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.

Technical Data

Structure of the Material	Mineral sealants, polymer modified admixtures and sulfate-resistant special cements	
Color	Gray	KR
Rupture Strength	≥ 1.00 N/mm ²	
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	30 minutes	
Period to Wait Before Opening to Service		
Mechanic Strength	2 days	
Water Impermeability	3 days	

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



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Application Procedure

Preparation of Substrate

Cement based surfaces of the structures contacting 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 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. **KANADICHT®** has to be applied on dry concrete by priming. Application surface has to be wetted well and then waited until it becomes wet/dry. If the coating material loses 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. **KANADICHT®** is slowly added to the water and mixed with a 400 - 600 RPM mixer for 3 - 5 minutes until a homogenous and unumpy mixture is obtained. After resting it for approximately 3-5 minutes and mixing again for 30 seconds, the material is ready to use.

Mixing Ratios

KANADICHT®	By Brush	By Trowel
Amount of Mixture Water	5,75 litre	4,75 litre
Density of Mixture	2,00 kg/litre	2,06 kg/litre

Application Method

Primer Application

Prepared **KANADICHT®** 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

	Min. Thickness	Min. Application Amount (powder product)
On Humid Surface	2,00 mm	3,25 kg/m ²
In Normal Pressure Water	2,50 mm	4,06 kg/m ²
In water tanks not deeper than 15 m.	3,50 mm	5,69 kg/m ²

Watchpoints

- **KANADICHT®** applied in +23°C gains mechanic strength after 2 days, becomes impermeable to water after 3 days, and gains final strength after 14 days. Higher temperatures decrease the time, lower temperatures increase the time.
- In outer surface applications, the surface has to be protected from sun, wind, frost or rain during the first 24 hours.
- Wet film thickness must not pass 2 mm in single layer. The application has to be at least two layers.
- Material has to be prepared to be used in 30 minutes.

Cleaning of Tools

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

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Packaging

25 kg polyethylene reinforced kraft bag.

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. **KANADICHT®** is frozen under 0°C. 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

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