

# MASTERKURE® 181

# Styrene Resin Based Concrete Curing Compound

## **Description of Product**

**MASTERKURE® 181** is a styrene resin based curing membrane or material applied on freshly poured concrete to enable optimum strength by holding water inside the concrete with its film layer and reducing shrinkage by preventing rapid drying.

## **Fields of Application**

- Airports and field concretes.
- Concrete pourings where humidity is low, evaporation and air flow is high.
- Surfaces where surface finishing (epoxy coating) is planned to be applied later.
- All BASF cementitious dry shakes.

### **Features and Benefits**

- A more efficient and economical method compared to similar cure methods like sack, burlap and irrigation.
- Forms a semi dull surface.
- Reduces shrinkage cracks caused by rapid drying.
- Enables a harder and smooth surface.
- When applied in fresh concrete, it doesn't

leave layers, strip off from surface or cause dusting.

- Enables perfect consistency with epoxy and polyurethane based coatings.
- Enables better curing compared to paraffin based cures.
- Easy to apply, reduces labor costs.

### **Application Procedure**

**MASTERKURE®** 181 should be applied by homogenous spraying or by rolls on freshly poured concrete. **MASTERKURE®** 181 is applied on surface finished surfaces of field, road and slab concretes and surfaces of concrete placed in molds after demolding.

#### Coverage

MASTERKURE<sup>®</sup> 181 recommended coverage is 0.15-0.17 kg/m<sup>2</sup>. In open air and windy environments, MASTERKURE<sup>®</sup> 181's covarage can be increased 0,30 kg/m<sup>2</sup> for effective curing. Coverage is reduced in inner surfaces under shadow. **BASF Yapi Kimyasallari San. A.Ş.** Technical Service should be consulted for detailed information.

## **Technical Data**

Structure of the Material	Styrene Resin Based
Color	Transparent Liquid
Density	~ 0.82 kg/liter
Explosion Point	+88°C
Appearance of Finished Film	Transparent, Smooth Film
Drying Time (ASTM C 309)	45 Minutes

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

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# Watch Points

- MASTERKURE<sup>®</sup> 181 is suggested to spray on concrete surface to obtain a uniform structure.
- MASTERKURE<sup>®</sup> 181 should be applied as a thin layer with a roll. Forming of congestion has to be prevented by a homogenous application of the material.
- In non-homogenous applications, regional color differences can be seen. In the days following the application, these regional differences will be reduced.
- MASTERKURE<sup>®</sup> 181 contains solvent. It is hazardous to go near to storage and application areas with flame. Storage and application areas should be ventilated.

## **Cleaning of Tools**

Spraying devices and/or rolls used in the application should be cleaned by warm water. If the spray nozzle will be used again, then it is suggested to be left in water.

### Packaging

13 kg can. 165 kg barrel.

### Storage

Must be stored in original packing, closed, and away from direct sunlight. Since segregation may be seen in the drums and barrels waiting for a long time, the product must be mixed mechanically before use. Pressured air must not be used when mixing. 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 can be used throughout the shelf life if the package cover is well closed.

## **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.Ş.** is only responsible from the quality of the product. **BASF Yapı Kimyasalları San. A.Ş.** 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 (09/2010).