

# MasterTop BC 309

## A two component, clear, non-solvented (total solid), epoxy binder

### PRODUCT DESCRIPTION

MasterTop BC 309 is a non-solvented, low viscous, clear and fluid two-component epoxy resin.

### FIELDS OF APPLICATION

MasterTop BC 309 is formulated to be used indoors for applications in industrial and decorative areas. MasterTop BC 309 can be used as a binder for stone carpet and colour quartz floors. It provides after curing a gloss appearance.

### FEATURES AND BENEFITS

- Low viscosity
- Low odour
- Easy to apply
- Excellent mechanical properties
- Low yellowing under UV lights
- High chemical resistance

### APPLICATION METHOD

MasterTop BC 309 is supplied in working packs which are pre-packaged in the exact ratio. Before mixing, precondition both A and B components to a temperature of approximately 15 to 25°C. Pour the entire contents of part B into the container of part A. **DO NOT MIX BY HAND.** Mix with a mechanical drill and paddle at a very low speed (ca. 300 rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. **DO NOT WORK OUT OF THE ORIGINAL CONTAINER.** After proper mixing to a homogeneous consistency pour the mixed parts A and B into a fresh container and mix for another minute.

After mixing, MasterTop BC 309 is applied to the prepared substrate, using a notched trowel or scraper. The teeth size should be selected according to the thickness of layer required (take care not to exceed max. recommended coverage rate). To remove air bubbles, spike roll directly after application. On broadcasted surfaces, MasterTop BC 309 will be applied with a roller. For stone carpet floors, coloured or oven dried silica sand (or other fillers) are added to the pre-mixed binder under constant mixing. Ensure thorough wetting of the filler. The mortar mix is spread over the substrate with a trowel, then is levelled using template strips and finally levelled and compacted with a trowel or power float.

The workability of reactive resins is influenced by the ambient and substrate temperature. At low temperatures the chemical reactions are slowed down; this lengthens the pot-life, re-coating interval and open time. At the same time the viscosity increases which leads to a higher consumption. High temperature accelerates chemical reactions so that the time frames mentioned above are shortened accordingly. To fully cure the material the substrate and working temperature must not fall below the minimum. The relative humidity limitations (minimum, maximum) must be observed.

Following application the material should be protected from direct contact with water for approx. 24 hours (at 20 °C). Within this period, contact with water causes white spotting on the surface (formation of carbamate) and/or stickiness that inhibits interlayer adhesion and must be removed. Apart from these limitations, the respective guidelines for this use of reactive resins in the concrete trade apply.

### SUBSTRATE PRE-TREATMENT

Substrates to be coated have to be firm, dry and load bearing, free of loose and brittle particles and substances, which impair adhesion such as oil, grease, rubber skid mark paint or other contaminants. As a rule, pre-treatment of the substrate by grit or shot blasting, high-pressure water jetting grinding or scarifying (including the necessary post-treatment) is mandatory.

After pre-treatment of the substrate, the bond strength of the substrate must be at least 1.5 N/mm<sup>2</sup> (check with an approved pull-off tester i.e. "Herion", load rate 100 N/s). The moisture content of the concrete should not be higher than 3% throughout (check i.e. with CM equipment). The temperature of the substrate must be at least 3 °C above the current dew point temperature. In addition, the guidelines relevant to the requirements for coating concrete substrates must be observed.

### CONSUMPTION

#### Application as primer:

As a primer, the consumption is typically between 0,3-0,5 kg/m<sup>2</sup> depending upon surface texture and porosity of the support.

#### Application as stone carpet:

Throw 1 bag of 25 kg of quartz in a barrel and add 2,0 kg of MasterTop BC 309 (that is to say 8% of MasterTop BC 309). Mix until the resin has wetted all quartz in the vessel.

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Apply this mix with a trowel onto a well prepared surface.

### Application as color quartz floor:

Mix 1 Part of MasterTop BC 309 with 2 Part of MasterTop F1X. Mix until the resin has wetted all quartz in the vessel. Apply this mix with a trowel or a toothed squeegee onto a well prepared surface. Broadcast the surface with color quartz sand up to rejection.

After curing, remove the excess of color quartz sand and apply MasterTop BC 309 as top coat (0,5 – 0,8 kg/m<sup>2</sup>).

### **CLEANING AGENT**

Re-usable tools must be cleaned carefully with MasterTop CLN 44 or with e.g. isopropanol.

### **PACKAGING**

MasterTop BC 309 is supplied in 20 kg working packs and/or in drums of 180 kg for each part.

### **COLOUR**

Colourless, transparent

### **STORAGE**

Store in original drums under dry conditions and a temperature between 15-25 °C. Do not expose to direct sunlight and prevent the temperature from falling below the above mentioned range (crystallisation). For maximum shelf life under these conditions, see „Best before....“ label.

### **EU REGULATION 2004/42 (DECOPAINT GUIDELINE)**

This product conforms to the EU directive 2004/42/EG (Deco-Paint directive) and contains less than the maximum allowable VOC Limit (Stage 2, 2010). According to the EU directive 2004/42, the maximum allowable VOC content for the Product Category IIA / j type sb is 500 g/l (Limit: Stage 2, 2010). The VOC content for MasterTop BC 309 is < 70 g/l (for the ready to use product).

### **WARNING AND PRECAUTIONS**

In its cured state, MasterTop BC 309 is physiologically non-hazardous. The following protective measures should be taken when working with the material:

Wear safety gloves, goggles and protective clothing. Avoid contact with the skin and eyes. In case of eye contact, seek medical attention. Avoid inhalation of the fumes. When working with the product do not eat, smoke or work near a naked flame. For additional references to safety-hazard warnings, regulations regarding transport and waste management please refer to the relevant Material Safety Data Sheet. The regulations of the local trade association and/or other authorities, regulating safety and hygiene of workers handling epoxy resins must be observed.

### **CONTACT**

Should you require any further information, please do not hesitate to contact your local sales consultant or take directly contact with us:

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Mitglied der



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Technical data*			
Mix ratio		by weight.	3 : 1
Density	Part A Part B mixed	g/cm³ g/cm³ g/cm³	1,13 0,97 1,11
Mixed viscosity		at 23°C	mPa.s 400
Pot-life		at 23°C	min. 30
Re-coating interval/ready for traffic		at 23°C	h d min. 14 max. 1
Fully cured/ready for exposure to chemicals		at 10°C at 23°C at 30°C	d d d 7 5 3
Substrate and application temperatures		°C °C	min. 10 max. 30
Max. permissible relative humidity		at 10 °C at T° >23 °C	% % 75 85
Technical data cured material*			
Shore-D hardness			85
Taber abrasion	CS 10, 1KG, 1000U	mg	20
Compressive strength	EN 12190	N/mm²	65
Bending tensile strength	EN 12190	N/mm²	72
Tensile strength	DIN 51220	N/mm²	45
E-Module	EN 13412	N/mm²	1800

\* The above figures are intended as a guide only and should not be used as a basis for specifications.

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## CE MARKING ACCORDING TO EN 13813

	
BASF Coatings GmbH Donnerschweer Str. 372, D-26123 Oldenburg	
16	
230901	
EN 13813: 2002	
EN 13813: SR-B1,5-AR1-IR4	
Synthetic resin screed for internal uses	
Essential characteristics	Performance
Fire behavior	Bfl-s1
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	< AR 1
Bond strength	> B 1,5
Impact resistance	> IR 4
Impact sound insulation	NPD
Sound absorption	NPD
Heat insulation	NPD
Chemical resistance	NPD

NPD = No performance determined

Performance determined in System **MasterTop 1209 R**

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**Disclaimer:**

In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with BASF and possible resulting damages are in the sole responsibility of the customer.

All descriptions, drawings, photographs, data, ratios, weights i.e. stated herein can be changed without advance notice and do not represent the condition of the product as stipulated by contract. It is the sole responsibility of the recipient of our products to observe possible proprietary rights as well as existing laws and provisions. The reference of trade names of other companies is no recommendation and does not exclude the use of products of similar type. Our information only describes the quality of our products and services and is no warranty. Liability is accepted for incomplete or incorrect particulars in our data sheets only in the event of intent or gross negligence, without prejudice to claims under product liability laws.