

# MasterTop® BC 375NAS

2K-PU coating, pigmented, anti-static, non-solvented, low emission, self-levelling

## DESCRIPTION

**MasterTop BC 375NAS** is an anti-static, non-solvented, low emission, pre-filled, 2K-self-levelling polyurethane floor coating.

## TYPICAL APPLICATIONS

**MasterTop BC 375NAS** is used indoor when an anti-static floor coating for light to medium traffic is required. **MasterTop BC 375NAS** is suitable for applications to mineral substrates such as concrete or cement mortar floor screeds, which have been primed with a 2K-EP primer, laid with copper strips and primed with the conductive primer **MasterTop P 687WAS**.

**MasterTop BC 375NAS** can also be applied to bituminous substrates with special primers like **MasterTop P 660** or **MasterTop BC 375N**. It is part of system **MasterTop 1324 ESD** for ESD requirements according to EN 61340-5-1 or in the system **MasterTop 1324 AS** according to EN 1081. **MasterTop BC 375NAS** fits to the low emission of AgBB standard.

## ADVANTAGES

- low emission according to AgBB
- conductive floor coating
- exhibits excellent mechanical and
- anti-static properties
- good abrasion resistance
- easy to clean and maintain
- low emission (AgBB)
- static crack bridging properties

## PACKAGING AND COLORS

**MasterTop BC 375NAS** is supplied in 30 kg working packs.

**Note:** Please note that the PTA of **MasterTop BC 375NAS** is the same as **MasterTop BC 375N** PTA. The conductive fibres are included in PTB.

**MasterTop BC 375NAS** is available in a wide range of RAL colours. For more information, please consult Master Builders Solutions Technical Department.

RAL 7032 and 7035 are available on stock.

**Note:** Aromatic polyurethanes as

**MasterTop BC 375N** tend under UV influence (in indoor and outdoor areas) to yellowing.

## APPLICATION GUIDELINES

**MasterTop BC 375NAS** is supplied in working packs, which are pre-packaged in the exact ratio. The PTA is the same as **MasterTop BC 375N**. The PTB contains the conductive fibres. Therefore, you have to use **MasterTop BC 375N** PTA and **MasterTop BC 375NAS** PTB. Pay attention to use **MasterTop BC 375NAS** PTB.

Before mixing, precondition both PTA and PTB to a temperature of approximately 15 to 25°C. Mix first the PTB separately in order to ensure the homogeneity of the conductive fibers. Pour the entire contents of PTB into the container of PTA. It is important to ensure that the PTB completely runs out with the conductive fibers. **If necessary, PTB must be scratched out with the last conductive fibers.**

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 PTA and PTB into a fresh container and mix for another minute. After mixing,

**MasterTop BC 375NAS** is applied to the substrate coated with the conductive primer **MasterTop P 687WAS**, using a notched trowel or scraper. The tooth size should be selected according to the required layer thickness (take care not to go below min. recommend coverage rate or to exceed max. recommend coverage rate, **this has a direct influence on the antistatic values**). To remove air bubbles, spike roll 5-10min. after application. The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times.

# MasterTop<sup>®</sup> BC 375NAS

High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly. To fully cure, the material, the substrate and the application temperature should not fall below the minimum. After application, the material should be protected from direct contact with water for approx. 24h (at 20°C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed. Carbamate of **MasterTop P 687WAS** has an effect on the conductivity of the coating and has to be removed.

After mixing, **MasterTop BC 375N** is applied to the substrate coated with a primer, using a notched trowel or scraper. The tooth size should be selected according to the required layer thickness (take care not to go below min. recommend coverage rate or to exceed max. recommend coverage rate). To remove air bubbles, spike roll 5-10min. after application.

The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly. To fully cure, the material, the substrate and the application temperature should not fall below the minimum. After application, the material should be protected from direct contact with water for approx. 24h (at 20°C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed.

## SUBSTRATE PRETREATMENT

**MasterTop BC 375NAS** must be applied to substrates primed with the conductive primer **MasterTop P 687W AS**. The substrate must be load bearing, free of loose and brittle particles as well as substances, which impair adhesion such as oil, grease, rubber skid marks, paint or other contaminants. Pre-treatment is only necessary when the re-coating interval of the conductive layer has been exceeded. If necessary, the conductive layer must be renewed. After surface

preparation the tensile strength of the substrate should exceed 1.5 N/mm<sup>2</sup> (check with an approved pull-off tester i.e. "Herion" at a load rate of 100 N/s). The residual moisture content of the substrate must not exceed 4% (check with e.g. CM device). The temperature of the substrate must be at least 3K above the current dew point temperature. A damp proof has to be installed and must be intact.

## CLEANING

Re-usable tools must be cleaned carefully with a suitable thinner (Xylene / MEK / Acetone) or with solvent naphtha.

## CONSUMPTION

ca. 2.0 – 2.55 kg/m<sup>2</sup>

Please note the systems **MasterTop 1324 AS** and **MasterTop 1324 ESD**.

**The consumption may not be below or over the above value to ensure the conductivity. If necessary, the substrate must be pre-levelled.**

## STORAGE AND SHELF LIFE

Store in original drums, under dry conditions and a temperature ranging from 15 - 25°C. Do not expose to direct sunlight and keep the temperature within the above mentioned range. Under these conditions the material has a shelf life of 6 months. For maximum shelf life under these conditions, see "Best before...." label.

# MasterTop<sup>®</sup> BC 375NAS

## TYPICAL PROPERTIES\*

Mix ratio			by weight	100 : 22
Density	Part A		g/cm <sup>3</sup>	1.51
	Part B		g/cm <sup>3</sup>	1.22
	mixed		g/cm <sup>3</sup>	1.45
Viscosity	Part A	at 23°C	mPas	9200
	Part B	at 23°C	mPas	1700
	mixed	at 23°C	mPas	3000
Pot life		at 23°C	min	30
Re-coating interval / ready for traffic		at 23°C	h	min 16 max. 72
Fully cured/ready for exposure to chemicals		at 23°C	d	7
Substrate and application temperatures		at 23°C	°C	min. 5 max. 30
Max. permissible relative humidity			%	75

## Technical data cured material

Shore-D hardness after 28 days			70
Resistivity to ground	EN 1081	Ohm	10 <sup>3</sup> -10 <sup>6</sup>
	EN 61340-5-1	Ohm	< 10 <sup>9</sup>
with MasterTop TC 409 W ESD	EN 61340-4-5	V	< 100

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

# MasterTop<sup>®</sup> BC 375NAS

## EU Regulation 2004/42 (Decopaint Guideline)


This product conforms to the EU-directive 2004/42/EG and contains less than the maximum allowable VOC limit (Stage 2, 2010) According to the EU directive 2004/42, the maximum VOC content for the product category IIA / j type sb is 500 g/l (Limit: Stage 2, 2010). The VOC content for **MasterTop BC 375NAS** is < 500 g/l (for the ready to use product).

## HEALTH AND SAFETY

**MasterTop BC 375NAS** is physiologically non-hazardous in its cured condition. The following protective measures should be taken when working with the material:

Avoid inhaling the fumes and contact with the skin. Wear safety gloves and goggles. 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 safely and hygiene of workers handling polyurethane and isocyanides must be observed.

## CE-MARKING ACCORDING TO EN 13813


0679
<b>BASF Construction Chemicals (Schweiz) AG</b> Industriestrasse 26, CH-8207 Schaffhausen
10
237508
EN 13813: 2002
<b>Synthetic resin screed</b> for use internally in buildings EN 13813 SR-B1,5-AR1-IR4
<b>Essential characteristics:</b> Performance <b>Fire behaviour:</b> Bfl-s1 <b>Release of corrosive substances:</b> SR <b>Water permeability:</b> NPD <b>Wear resistance:</b> <AR1 <b>Bond strength:</b> > B 1.5 <b>Impact resistance:</b> >IR4 <b>Impact sound insulation:</b> NPD <b>Sound absorption:</b> NPD <b>Heat insulation:</b> NPD <b>Chemical resistance:</b> NPD <b>Slip/Skid resistance:</b> R9 <b>Emissions behavior:</b> Ü-Z: Z-156.605-910

NPD = No Performance Determined

Performance determined in System **MasterTop 1324**

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

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## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## NOTE

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