# MasterCoat® ER 372

A Two Component, Non-Solvented (Total Solid), Epoxy Self-Leveling Floor Coating with Low Emissions

## Material Description

**MasterCoat® ER 372** is a non-solvented, pre-filled and pigmented, two-component, self-levelling epoxy coating.

## Areas of Application

**MasterCoat® ER 372** is applied indoors as a self-levelling coating and suitable for medium to heavy industrial wear. **MasterCoat® ER 372** is applied to substrates such as concrete and cement screeds. **MasterCoat® ER 372** can be filled with sand up to 1 : 0.7 by weight depending on the temperature and the applying thickness you require on the job site. It is use in the system **MasterCoat® 1273** and **MasterCoat® 1273 R**

## Characteristics and Benefits

- Exhibits excellent mechanical strength
- Application as self-levelling body coat on smooth surfaces and as top coat on broadcasted surfaces

| Technical Properties | |
|---|---|
| Structure of the Material<br>**MasterCoat™ ER 372** Part A<br>**MasterCoat™ ER 372** Part B | <br>Epoksi Resin<br>Epoksi Hardener |
| Color | RAL Colours |
| Density (23°C)<br>Part A<br>Part B<br>Mixture | <br>1,65 – 1,70 g/cm³<br>1,05 g/cm³<br>1,50 – 1,60 g/cm³ |
| Viscosity (23°C)<br>Part A<br>Part B<br>Mixture | <br>5200 – 6000 mPa.s<br>150 mPa.s<br>1500 – 2000 mPa.s |
| Pot Life (23°C) | 40 mins. |
| Re-coating Interval / Ready for Traffic<br>10°C<br>23°C | <br>Min. 30 hours Max. 3 days<br>Min. 10 hours Max. 2 days |
| Fully Cured / Ready for Exposure to Chemicals (20°C) | 5 days |
| Substrate and Application Temperatures (°C) | Min. 10 Maks. 30 |
| Max. Permissible Relative Humidity | % 75 |
| Shore D hardness (7 days) | 81 |
| Taber Abrasion (23°C) (28 days) | 50 mg (*CS10, 1000gr, 1000U)<br>114 mg (*H-22, 1000gr, 1000U) |
| Compressive Strength (TS EN 13892-2) | 65 N/mm² |

*The above figures are intended as a guide only and should not be used as a basis for specifications.*
**H-22 This wheel produces a coarse abrasion effect. It is used to test rubber, linoleum, leather, deep pile fabrics (such as car floor coverings), and concrete.*
**CS10 This resistant wheel provides light to moderate abrasion, similar to that which occurs during normal use, cleaning, and polishing. This popular wheel can be used to test various materials, including organic coatings, plastics, textiles, leather, and paper products. Resurface with the S-11 resurfacing disc.*

# MasterCoat® ER 372

A Two Component, Non-Solvented (Total Solid), Epoxy Self-Leveling Floor Coating with Low Emissions

- Extremely resistant if exposed for medium to heavy industrial wear
- Low emissions: AgBB conform
- Abrasion resistant
- Easy to apply
- Easy to clean and maintain
- Extremely resistant to water, sea and waste water, as well as resistant to a variety of alkalis, diluted acids, brine, mineral oils, lubricants and fuels.

## Processing Method

### (A) Preparation of Substrate

MasterCoat® ER 372 must be applied to primed or scratch primed substrate. 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 primer has been exceeded. If necessary, the primer must be renewed. After surface preparation the tensile strength of the sub-strate should exceed 1.5 N/mm$^2$ (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 course must have been properly installed and intact. In addition to this, the respective guidelines for the applica-tion of reactive resins on substrates have to be followed.

### (B) Mixing

MasterCoat® ER 372 is supplied in working packs which are prepackaged in the exact ratio. Before mixing, precondition both A and B components to a temperature of approximately 15°C 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.

### (C) Processing

After mixing, MasterCoat® ER 372 is applied as the main coating material using a toothed trowel or spatula. The comb tooth size should be selected in accordance with the desired layer thickness (care should be taken not to exceed the recommended usage amount). After application, remove air bubbles with a spiked roller.
Spreading MasterCoat® ER 372 coating material on the surface is done with the help of a toothed trowel and roller.
The curing time of the material is affected by the ambient and ground temperature and relative humidity in the air. At low temperatures, the chemical reaction slows down, resulting in a prolonged use time, coating time and working time. High temperatures increase the chemical reaction and the above mentioned times are shortened accordingly. For complete curing of the material, the ambient and ground temperature should not fall below the minimum permissible temperature. After application, the coating should be protected from direct water contact for at least 24 hours (20°C). If water contact occurs, carbonation and stickiness will occur on the surface, which must be removed. Carbamate has a significant effect on the surface and should be removed. In addition to all these restrictions, the following rules must be observed for resin-based chemical products in concrete.

## Consumption

As self-levelling body coat on smooth surfaces: ca. 3,3 – 3,7 kg/m$^2$ depending on the filling ratio (total consumption including sand, filling ratio between 1:0,5 and 1:0,7).

# MasterCoat® ER 372

A Two Component, Non-Solvented (Total Solid), Epoxy Self-Leveling Floor Coating with Low Emissions

As top coat on broadcasted surfaces: ca. 0,8 – 1,2 kg/m$^2$ (application with a roll without sand filling) depending on the system and the roughness of the surface.
For more information, please refer to the System Data Sheets **MasterCoat® 1273** and **MasterCoat® 1273 R**

## Cleaning of Tools

All the tools and equipments must be cleaned by isopropanol.

## Packaging

**MasterCoat® ER 372** is supplied in 30 kg working packs.
**Part A**: **MasterCoat® ER 372** 25,5 kg tin
**Part B**: **MasterCoat® ER 372** 4,5 kg tin

## Shelf Life

Maximum shelf life is 12 months from the date of production under appropriate storage conditions.

## Storage

Store in original drums under dry conditions and a temperature between 15°C - 25°C. Do not expose to direct sun-light and prevent the temperature from falling below the above mentioned range.

## Health and Safety

In its cured state, **MasterCoat® ER 372** 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. The regulations of the local trade association and/or other authorities, regulating safety and hygiene of workers handling epoxy resins must be observed.

## Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

## Contact

MBT Teknik Yapı Kimyasalları San. ve Tic. A.Ş.
Eyüp Sultan Mah. Sekmen Cad. Hayy 1000A No:26/8
Sancaktepe, İstanbul
Tel: 0216 561 35 45 www.mbt-tech.tr

# MasterCoat® ER 372

A Two Component, Non-Solvented (Total Solid), Epoxy Self-Leveling Floor Coating with Low Emissions

| | |
|---|---|
| CE | |
| 2184 | |
| MBT TEKNİK YAPI KİMYASALLARI SAN. VE TİC. A.Ş. | |
| Eyüp Sultan Mah. Sekmen Cad. HAYY 1000A No:26 K:5 D:8, 34885 Sancaktepe, İstanbul, Türkiye | |
| 25 | |
| DOP NO:1201001 | |
| 2184-CPR-0450 | |
| MasterCoat® ER 372 | |
| TS EN 1504-2:2004<br>1.3 Yabancı madde girişine karşı koruma, 2.2 Nem Kontrolü, 5.1 Fiziksel Direnç, 8.2 Nem içeriğini sınırlayarak direnci artırma<br>*1.3 Protection against ingress, 2.2 Moisture control, 5.1 Physical resistance, 8.2 Increasing resistivity* | |
| Beton için yüzey koruma sistemleri<br>Surface protection systems for concrete | |
| Kaplama uygulaması<br>Coating application | |
| Aşınma Direnci<br>(Abrasion Resistance) | < 3000 mg |
| Karbondioksit Geçirgenliği<br>(Permeability to $CO_2$) | > 50m SD |
| Su Buharı Geçirgenliği<br>(Permeability to water vapour) | Sınıf I<br>Class I |
| Kapiler Su emme ve Su geçirgenliği<br>(Capillary absorption and permeability to water) | w<0,1 kg /m$^2$.√h |
| Çarpmaya Direnç<br>(Impact resistance) | Sınıf II : 10 Nm<br>Class II : 10 Nm |
| Çekip koparma deneyi<br>(Adhesion strength by pull-off test) | Rijit sistemler trafik yük ile birlikte: ≥2 N/mm$^2$<br>Rigid systems with traffic load |
| Yangına karşı tepki<br>(Reaction to fire) | D-s2,d0 |
| Tehlikeli maddeler<br>(Dangerous substances) | Madde 5.3 'e uygun<br>(Comply with clause 5.3) |