MIG DHMb® Lining System
For interior application


# MIG-ESP® Interior

## Hygienic interior coating

- ✓ better thermal comfort with lower heating demand
- ✓ heating and cooling regulation (through infrared reflection)
- ✓ stable and comfortable indoor climate
- ✓ antibacterial effect
- ✓ reduces condensation significantly
- ✓ awarded the certificate "Recommended for healthy housing" by the Society for Medically Sound Lodgings, Building Hygiene and Indoor Toxicology e.V.
- ✓ VOC emission label A
- ✓ recommended for ecological, energy-efficient renovation
- ✓ natural prevention against moulds
- ✓ reduces $CO_2$ emissions
- ✓ non-flammable – building material class A2

## Product description

**MIG-ESP® Interior** is an interior coating based on the **MIG DHMb® Lining Technology** (DHMb® = Double Hybrid Membrane) according to DIN EN 13300.

**MIG-ESP® Interior** can be applied with paint rollers, brushes or the MIG-Zip 52 spraying unit.

**MIG-ESP® Interior** can be used with an appropriate primer on a variety of substrates in the entire indoor area. **MIG-ESP® Interior** is the finish coat for **MIG Therm M 65** and **MIG 262**. Further areas of application include renovations on all paint-bearing substrates. The **MIG-ESP®**- colour chart offers a wide range of colour options.

**Technical consulting services**
Phone: + 49 (0)5258-97482-0
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## Processing and substrate pretreatment

MIG-ESP® Interior is fast-drying and odourless during application, which also allows processing during room use.
Before processing, stir the material mechanically for approx. 3 minutes. Cover all adjacent components well or protect against splashes.
Do not process when the relative air humidity is high.
Spread MIG-ESP® Interior evenly with a suitable roller, brush or the MIG-Zip 52 spraying unit. The nozzle size should be 2.5 mm. The MIG-Zip 52 low-pressure spraying device with a nozzle size of 2.5 mm, which is specified for the coating, is available from us. Do not mix MIG-ESP® Interior with other materials. When using rollers or brushes, a dilution with drinking water or MIG-ESP® Sealing Primer of max. 3 %, and when using the MIG-Zip 52 spraying device, a dilution of max. 5 %, is recommended for better processing. The object and ambient temperature should not be below + 5°C and not above + 35°C during application. Shading is necessary when exposed to sunlight. Surface drying can be achieved after only approx. 30 minutes. The dry-through time for each of the two coating processes is approx. 24 hours under normal conditions (+ 20°C/65 % relative air humidity). Lower temperatures and higher relative air humidity extend the dry-through time.

The substrate must be clean, dry, solid, free of efflorescence, dust and loose parts or release agents (e.g. formwork oil). For absorbent substrates, a priming coat with MIG-ESP® Sealing Primer is required. This consolidates the substrate and compensates for different absorption characteristics. For metal, concrete and gypsum surfaces as well as contaminated, penetrating substrates we recommend MIG-ESP® Special Primer as a bonding agent. For highly absorbent surfaces such as stucco plaster, porous lightweight concrete, aerated concrete, mineral insulating plaster, foamed concrete, foam glass, silicate and insulating boards, it is generally necessary to apply MIG-ESP® Sealing Primer twice. Use MIG-ESP® PVC Primer for tent tarps.

A layer thickness of 0.4 mm is required to achieve the full effect of the MIG DHMb® Lining Technology! When applying MIG-ESP® Interior with a roller or a brush, experience shows that two coats are necessary for the required layer thickness. When applying tinted MIG-ESP® Interior, use MIG-ESP® Interior white as the first coat before applying the tinted second coat.

Any structural defects or damages must be remedied before application!

### Coating procedure

| | | |
|---|---|---|
| 1. | Substrate preparation | Substrate must be clean, dry, solid, free of efflorescence, dust and loose parts or release agents (e.g. formwork oil) |
| 2. | Apply primer | depending on substrate (see page 4, MIG DHMb® Lining System – Products → Primers), apply e.g. MIG-ESP® Sealing Primer as plaster strengthener. Allow to set for approx. 1 hour. Use MIG-ESP® PVC Primer for tent tarps |

| | |
|---|---|
| 3. **Stir** | Stir MIG-ESP® Interior for approx. 3 minutes with an electric stirrer until the consistency is creamy |
| 4. **First coat** | Spread MIG-ESP® Interior **white** evenly **in a crosswise motion** and finish off by rolling the surface in one direction |
| 5. **Drying time** | 24 hours drying time between both coating processes |
| 6. **Second coat** | Spread MIG-ESP® Interior **white** or tinted evenly **in a crosswise motion** and finish off by rolling the surface in one direction |

## Technical data

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| solvent-free, environmentally friendly and odourless |
| water-repellent, microporous and non-film forming |
| Building Material Class A2 (non-flammable), DIN 4102, Part 1 (May 1998) |
| highly water vapour permeable (sD value 0.06 m ± 0.02 according to EN ISO 7783-2) |
| water absorption, w-value after 24 hours < 0.05 $Kg/m^2h^{0.5}$ according to DIN EN 1062-3 (W2) |
| wet abrasion class III |
| opacity class II at approx. 0.25 $L/m^2$ |
| degree of whiteness: L → 94.0 |
| gloss grade: matt (DIN 53778) |
| pH-value 9.0 (± 1.0) |
| density 1.15 $g/cm^3$ (± 0.1) |
| degree of reflection > 90 % for white coating |
| $\epsilon_n$ = 0.285 according to DIN-EN 12898 : 2019-06 with FTIR Bruker Vertex 70 at 5.5 to 23.3 µm<br>$\epsilon_n$ = 0.052 at 1.9 to 3.1 µm |
| crack-filling up to approx. 0.5 mm |
| antimicrobial effect (99.99% MRSA and Escherichia coli reduction) according to ISO 22196 (see test report QualityLabs BT GmbH) |

## Consumption

Depending on the type and porosity of substrate, approx. 0.5 $L/m^2$ with two coats on smooth surfaces.

**Rough, structured or highly absorbent surfaces can significantly increase consumption. Exact consumption quantities can be determined by creating test areas.**

## Cleaning

Clean tools thoroughly with water after use. The containers must be emptied completely and recycled.

## Storage

At least 12 months shelf life from date of sale **if stored dry, frost-free and cool** under proper conditions in original sealed containers. Tinted goods must be processed within 3 months.

## Packaging

5 L (per plastic bucket) x 60 buckets **(per** pallet) = 300 L
15 L (per plastic bucket) x 24 buckets (per pallet) = 360 L
1,000 L IBC

## Customs tariff number

32099000

## MIG DHMb® Lining System - Products

Primers
MIG-ESP® Sealing Primer
MIG-ESP® Special Primer
MIG-ESP® Primer quartz-filled
MIG-ESP® PVC Primer
MIG-ESP® Primer for Wood (for indoor use only)

Impregnation
MIG Impregnating Agent for Natural Stone Facades

Sealing
MIG Sealer

Plasters
MIG 262
MIG Therm M 65
MIG Therm L 14
MIG HRP Heat Resistant Protector
MIG Thermalife Ecoplaster

Finish coats
MIG-ESP® Interior
MIG-ESP® Interior Anti-Microbial
MIG-ESP® Exterior
MIG-ESP® Rooflect

## Warranty

We give a 10-year quality guarantee on **MIG-ESP® Interior**. This warranty applies exclusively to the product applied to the surfaces by professional painters and not to the related services in compliance with our warranty conditions.

For the warranty conditions form:

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As of: 06-2021

## Legal Information

The information in this publication is based on our current technical knowledge and experience. Due to the abundance of possible influences during the processing and application of our products, they do not release the user from carrying out his own tests and trials and are only general guidelines. A legally binding assurance of certain properties or suitability for a specific purpose cannot be derived from this. Any industrial property rights as well as existing laws and regulations must always be observed by the user on his own responsibility. With the publication of this data sheet, all previous data sheets lose their validity.

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