

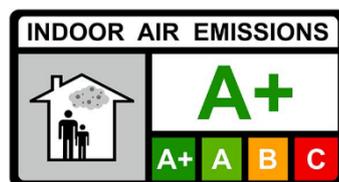
MIG DHMb® Lining System**Interior Application**

MIG-ESP® Interior Anti-Microbial

Germ-proof interior coating

- ✓ > 99.99 % sustainable reduction of bacteria
- ✓ no additional biocides
- ✓ reduces condensation significantly
- ✓ heating and cooling regulation (infrared reflection)
- ✓ better thermal comfort with lower heating demand
- ✓ stable and comfortable room climate
- ✓ 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 molds
- ✓ reduces CO₂ emissions

Important: In patient areas, **MIG-ESP® Interior Anti-Microbial** can help to prevent and/or to reduce hypothermia and hyperthermia.



Product Description

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

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

MIG-ESP® Interior Anti-Microbial can be used with an appropriate primer on a variety of substrates in the entire indoor area.

MIG-ESP® Interior Anti-Microbial 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 service

Phone: +49 (0) 5258 - 974 82 0

E-Mail: info@mig-mbh.de

Processing and Substrate Pretreatment

MIG-ESP® Interior Anti-Microbial is fast-drying and odourless during application, which also allows processing during room use.

Do **not** mix **MIG-ESP® Interior Anti-Microbial** with other materials.

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.

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.

Spread **MIG-ESP® Interior Anti-Microbial** 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.

When using rollers or brushes, a dilution with drinking water or **MIG-ESP® Sealing Primer** of max. 2 %, and when using the **MIG-Zip 52** spraying device, a dilution of max. 3 %, is recommended for better processing.

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/60 % relative air humidity). Lower temperatures and higher relative air humidity will 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).

Any structural defects or damages must be remedied before application.

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 0.40 mm is required to achieve the full effect of the MIG DHMb® Lining Technology!

When applying MIG-ESP® Interior Anti-Microbial with a roller or a brush, experience shows that two coats are necessary for the required layer thickness.

When applying tinted MIG-ESP® Interior Anti-Microbial, use MIG-ESP® Interior Anti-Microbial, White as the first coat before applying the tinted second coat.

Coating Procedure

Substrate preparation	Substrate must be clean, dry, solid, free of efflorescence, dust and loose parts or release agents (e.g. formwork oil)
Apply primer	Depending on substrate (see page 5, MIG DHMb® Lining System – Products → Primers), apply e.g. MIG-ESP® Sealing Primer as plaster strengthener - allow to set for approx. 1 hour
Stir	Stir MIG-ESP® Interior Anti-Microbial for approx. 3 minutes with an electric stirrer until the consistency is creamy
First coat	Spread MIG-ESP® Interior Anti-Microbial, White evenly in a crosswise motion and finish off by rolling the surface in one direction
Drying time	24 hours drying time between both coating processes
Second coat	Spread MIG-ESP® Interior Anti-Microbial, White or tinted evenly in a crosswise motion and finish off by rolling the surface in one direction

Technical Data

solvent-free, environmentally friendly and odourless	
water-repellent, microporous and non-film forming	
Building material class	A2 (non-flammable) according to DIN 4102, Part 1 (May 1998)
Water vapor permeability (S _D Value)	0.06 m ± 0.02 according to DIN EN ISO 7783-2 equivalent to V1
Water absorption after 24 hours (w Value)	< 0.50 kg/m ² h ^{0.5} according to DIN EN 1062-3 equivalent to W2
Wet abrasion class	II
Opacity class	II at approx. 0.20 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 (± 0.10)
Degree of reflection	> 90 % for white coating
Emissivity Value (ε _n)	0.244 at 5.5 to 23.3 μm 0.057 at 1.9 to 3.1 μm with FTIR Bruker Vertex 70 according to DIN-EN 12898:2019-06
Crack-filling up to	approx. 0.50 mm
Antimicrobial effect	99.99% MRSA and Escherichia coli reduction acc. to ISO 22196
SRI Value (Solar Reflectance Index)	111.4 in low-wind (0 – 2 m/s) 110.4 in medium-wind (2 – 6 m/s) 109.9 in high-wind (6 – 10 m/s)
Solar reflectance	0.873 (87.3 %)
Solar absorptance	0.127 (12.7 %)
Heat conductivity	λ _{dry} 0.183 W/(m*K)
Processing temperature	+ 5°C to + 35°C

U-Value Effect

Hygrothermal energy efficiency simulation to demonstrate energy efficiency can be done on request.

Consumption

Depending on the type and porosity of substrate, approx. 0.40 L/m² 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

Coatings

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

Plasters

MIG 262
MIG Therm M 65
MIG Therm M 55
MIG Thermalife® Ecoplaster
MIG-HRP Heat Resistant Protector
MIG-HRP 280 Bonding Agent
MIG Therm L 14

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)
MIG-ESP® Bitumen Primer

Sealing

MIG Sealer

Impregnation

MIG Impreg. Agent for Natural Stone Facades

Warranty

We provide a 10-year colour tone guarantee on our interior coating **MIG-ESP® Interior Anti-Microbial**. This guarantee applies exclusively to the product applied to surfaces by specialist firms and not to the associated services, subject to compliance with our warranty conditions. A complete chain of evidence of correct application must be provided.

For the warranty conditions form:

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.