MIG DHMb[®] Lining System MED For interior application

MIG-ESP® Interior Anti-Microbial

Germ-proof interior coating

- ✓ \rightarrow 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 prevent and/or 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.





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Processing and substrate pretreatment

MIG-ESP[®] Interior Anti-Microbial 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 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. Do <u>not</u> mix MIG-ESP® Interior Anti-Microbial with other materials. 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 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). 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 <u>two coats</u> are necessary for the required layer thickness. When applying tinted MIG-ESP[®] Interior Anti-Microbial, use <u>MIG-ESP[®] Interior</u> <u>Anti-Microbial</u>, <u>White</u> as the first coat before applying the tinted second coat.

Any structural defects or damages must be remedied before application!

outing procedure		
1. Substrate	Substrate must be clean, dry, solid, free of efflorescence, dust and	
preparation	loose parts or release agents (e.g. formwork oil)	
2. Apply primer	Depending on substrate (see page 4, MIG DHMb $^{ m \$}$ Lining System –	
	Products $ ightarrow$ Primers), apply e.g. MIG-ESP $^{ extsf{B}}$ Sealing Primer as plaster	

Coating procedure

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		strengthener. Allow to set for approx. 1 hour. Use MIG-ESP® PVC Pri- mer for tent tarps.
3.	Stir	Stir MIG-ESP [®] Interior Anti-Microbial for approx. 3 minutes with an electric stirrer until the consistency is creamy
4.	First coat	Spread MIG-ESP [®] Interior Anti-Microbial, 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 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

highly water vapor permeable (sD value $0.06 \text{ m} \pm 0.02 \text{ according to EN ISO 7783-2})$

water absorption, w-value after 24 hours < 0.50 kg/m²h^{0.5} according to DIN EN 1062-3 (W2)

wet abrasion class III

opacity class II at approx. 0.25 L/m²

degree of whiteness: $L \rightarrow 94.0$

gloss grade: matt (DIN 53778)

pH-value 9.0 (± 1.0)

density 1.15 g/cm³ (± 0.1)

degree of reflection > 90 % for white coating

 $\varepsilon\,$ n = 0.244 according to DIN-EN 12898 : 2019-06 with FTIR Bruker Vertex 70 at 5.5 to 23.3 μm $\varepsilon\,$ n = 0.057 at 1.9 to 3.1 μm

crack-filling up to approx. 0.50 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. 0.50 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.

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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

<u>Primers</u>	<u>Plasters</u>
MIG-ESP [®] Sealing Primer	MIG 262
MIG-ESP [®] Special Primer	MIG Therm M 65
MIG-ESP [®] Primer quartz-filled	MIG Therm L 14
MIG-ESP [®] PVC Primer	MIG HRP Heat Resistant Protector
MIG-ESP [®] Primer for Wood (for indoor	MIG Thermalife Ecoplaster
use only)	<u>Finish coats</u>
<u>Impregnation</u>	MIG-ESP [®] Interior
MIG Impregnating Agent for Natural Stone	MIG-ESP [®] Interior Anti-Microbial
Facades	MIG-ESP [®] Exterior
<u>Sealing</u>	MIG-ESP [®] Rooflect
MIG Sealer	

Warranty

We give a 10-year quality guarantee on MIG-ESP® Interior Anti-Microbial. 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. An unbroken chain of evidence showing the correct application of the product 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 quidelines. 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.

