ÉMI NON-PROFIT LIMITED LIABILITY COMPANY FOR
QUALITY CONTROL AND INNOVATION IN BUILDING
H-2000 Szentendre, Dózsa György út 26. Mailing address: H-2001 Szentendre, POB: 180.
Phone: +36 (26) 502 300 Fax: +36 (26) 311 108
E-mail: info@emi.hu Website: http://www.emi.hu

A-49/2022

NMÉ
NATIONAL TECHNICAL ASSESSMENT

Product name:	**MIG-ESP® Interior** **MIG-ESP® Interior Anti-Microbial**
Intended use of the product:	**Coating of interior walls and ceilings, especially in hospitals or other places where an antibacterial surface is required**
Product area	Internal and external wall and ceiling finishes. Internal partition kits. (21)
Manufacturer of the product:	**MIG mbH – Material Innovative Gesellschaft mbH** **33154 Salzkotten, Am Grarock 3, Germany**
Authorised representative of the manufacturer:	**GreenMIG Hungary Kft.** **1083 Budapest, Práter utca 59.**
NMÉ valid from*:	**02.11.2022.**

ÉMI ÉPÍTŐIPARI MINŐSÉGELLENŐRZŐ INNOVÁCIÓS NONPROFIT KFT.

Zoltán Budavári
Head of the Technical Assessment Office

The National Technical Assessment consists of 6 pages including 0 numbered Annex.

* The validity of the NMÉ is subject to certain conditions. The validity of the NMÉ shall be checked on the website (www.emi.hu) of the ÉMI Non-profit Llc.

Project number: É1-M203X-25538-2022
DK-M999X-26047-2022

I LEGAL BASES AND GENERAL CONDITIONS

1 This NMÉ has been issued by the ÉMI Non-profit Llc. for Quality Control and Innovation in Building based on the
- Government Decree No. 275/2013 (VII. 16.) on the detailed rules relating to the planning and installation of construction products into construction works and the
- the designation of the Government Office of Budapest Capital (BP/0102/684-7/2021), and
- the data detailed in the Performance Assessment Report No. A-49/2022 dated on 02.11.2022.

2 The holder of the NMÉ is the manufacturer of the construction product.

3 The holder of the NMÉ is not allowed to assign the NMÉ to third party. The NMÉ is valid exclusively for products manufactured in the indicated production plants.

4 The manufacturer of the product or their authorized representative shall notify if the important characteristics of the product, the quality of its raw materials or the production circumstances change and shall apply for the revision and, if necessary, for the amendment of NMÉ.

5 The ÉMI Non-profit Llc. withdraws the NMÉ for the product based on the request of the manufacturer or their authorized representative, based on the decision of the market surveillance authority or at the end of co-existence period, as stipulated in the Regulation No. 305/2011/EU Article 17 (5) of the European Parliament and Council, of the harmonized standard covering the construction product subject of this NMÉ.

6 ÉMI Non-profit Llc. shall issue the NMÉ in Hungarian, and on subsequent request of the manufacturer or their authorized representative for an additional fee in English language. The legal basis is the Hungarian version of the NMÉ.

7 The NMÉ may only be copied or published by means of other data medium in its entirety. Extracts are only allowed on the prior written approval of ÉMI Non-profit Llc. The fact of publishing extracts shall be indicated. Text and figures of advertising materials cannot be contrary to the content of the National Technical Assessment and cannot give rise to misunderstanding.

8 The NMÉ will not replace other permits and certificates (e.g., environment protection and property protection, building authorities' permits) necessary for distribution, installation and use of the product specified by separate provision of law and the documents relating to the constancy of product performance (e.g., product certificate, factory production control certificate, declaration of performance).

9 The declaration of performance issued based on the NMÉ shall not entitle either the manufacturer or their authorized representative to use CE conformity marking on the product or on its packaging or accompanying documents.

10 The NMÉ does not state the fitness for purpose of the product for the particular use. It provides only performance values for essential characteristic as a basis for the declaration of performance. Based on the performances specified in the declaration of performance issued by the manufacturer the product can be installed into construction works in which it complies with the expected technical performance.

II SPECIFIC CONDITIONS OF THE NATIONAL TECHNICAL ASSESSMENT

1 DATA

1.1 Manufacturing site of the product

MIG mbH – Material Innovative Gesellschaft mbH
33154 Salzkotten, Am Grarock 3, Germany

1.2 Description of the product

MIG-ESP® Interior and MIG-ESP® Interior Anti-Microbial are coatings for interior walls and ceilings. The only difference between MIG-ESP® Interior and MIG-ESP® Interior Anti-Microbial is the distilled water.
The basic raw materials are calcium carbonate, sodium hydroxide, silicone resin binder and water or, in the case of MIG-ESP® Interior Anti-Microbial, distilled water.

Product identification properties:

Property	Value	Assessment method
Product: MIG-ESP® Interior, MIG-ESP® Interior Anti-Microbial		
Density [g/cm^3]	1.15 ± 0.1	MSZ EN 2811- 1:2016
Particle size [µm]	≤ 25.0	MSZ EN 1015- 1:1999
pH [-]	9.0 ± 1.0	indicator

1.3 Description of the intended use of the product

MIG-ESP® Interior and MIG-ESP® Interior Anti-Microbial products are used as coatings of interior walls and ceilings, especially in hospitals or other places where antibacterial surfaces are required. Before applying MIG-ESP® Interior Anti-Microbial or MIG-ESP® Interior, MIG-ESP® Sealing Primer shall be used.

2 ESSENTIAL CHARACTERISTICS, PERFORMANCE AND ASSESSMENT METHODS

2.1 Mechanical resistance and stability

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2.2 Safety in case of fire

Essential characteristics	Performance	Assessment method
Product name: MIG-ESP® Interior, MIG-ESP® Interior Anti-Microbial		
Reaction to fire class [-]	A2-s1, d0*	MSZ EN 13501- 1:2019

*In case of ≤0.5 mm thickness, 500 g/m^2 surface mass and a substrate with a reaction to fire class of min. A2-s1,d0.

2.3 Hygiene, health, and the environment

Essential characteristics	Performance	Assessment method
Product name: MIG-ESP® Interior, MIG-ESP® Interior Anti-Microbial		
Antibacterial reduction [%] • Staphylococcus aureus (MRSA) • Escherichia coli	> 99.99	ISO 22196:2011
Water vapour permeability [$g*m^{-2}*day^{-1}$]	NPD*	MSZ EN ISO 7783:2012
Water permeability[$kg*m^{-2}*h^{-0.5}$]		MSZ EN 1062- 3:2009
Volatile organic compounds (after 28 days) [$\mu g/m^3$] • TVOC • Formaldehyde • Acetaldehyde • Toluene • Tetrachloroethylene • Ethylene benzene • Xylene • Styrene • 2-butoxyethanol • 1,2,4-trimethylbenzene • 1,4-Dichlorobenzene	 55.0 17.0 < 3 < 2 < 2 < 2 < 2 < 2 < 2 < 2 < 2	MSZ EN 16516:2017+A1:2020

* NPD (No Performance Determined)

2.4 Safety and accessibility in use

Essential characteristics	Performance	Assessment method
Product name: MIG-ESP® Interior, MIG-ESP® Interior Anti-Microbial		
Bond strength [N/mm^2]	NPD*	MSZ EN 1542:2000

* NPD (No Performance Determined)

2.5 Protection against noise

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2.6 Energy economy and heat retention

Essential characteristics	Performance	Assessment method
Product name: MIG-ESP® Interior, MIG-ESP® Interior Anti-Microbial		
Emission (ε)* MIG-ESP® Interior • 5.5 - 23.3 µm wavelength • 1.9 - 3.1 µm wavelength • 1.1 - 23.3 µm wavelength MIG-ESP® Interior Anti-Microbial • 5.5 - 23.3 µm wavelength • 1.9 - 3.1 µm wavelength • 1.1 - 23.3 µm wavelength	 0.285 0.052 0.092 0.244 0.057 0.094	MSZ EN 12898:2019

Essential characteristics	Performance	Assessment method
Reflection (R)* MIG-ESP® Interior • 5.5 - 23.3 µm wavelength • 1.9 - 3.1 µm wavelength • 1.1 - 23.3 µm wavelength MIG-ESP® Interior Anti-Microbial • 5.5 - 23.3 µm wavelength • 1.9 - 3.1 µm wavelength • 1.1 - 23.3 µm wavelength	 0.715 0.948 0.908 0.756 0.943 0.906	MSZ EN 12898:2019
Degree of whiteness	NPD**	CIE

* At 283°K, in case of 400 µm layer thickness
** NPD (No Performance Determined)

2.7 Sustainable use of natural resources

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3 REQUIREMENTS FOR THE ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE

3.1 System for the assessment and verification of constancy of performance

Based on Commission Decision No. 98/437/EC,
and according to Annex V of the European Parliament and Council Regulation No. 305/2011/EU:
System (3).

3. 2 Tasks of the manufacturer

3.2.1 Factory production control (FPC)

The manufacturer shall develop, document, and operate an FPC system that ensures that the performance of the products to be installed meets continuously the values specified in the present NMÉ in a verifiable way
If the manufacturer's quality management system complies with standard MSZ EN ISO 9001 and their system is complemented with the requirements in relation to factory production control stipulated in this NMÉ, this factory production control system can be considered to have met the requirements.
Regarding the product the manufacturer shall develop, operate, and control a factory production control system, which ensures the constancy of performance of the product.

The factory production control system shall include:
- the tasks required in the framework of the procedure and the person responsible for them,
- the rules regarding the review of the qualifications and training of personnel, production and testing equipment, raw materials, supplied products, manufacturing process, handling of emerging non-compliances and complaints and the review of the factory production control system by the manufacturer,
- evaluation of the results of tests made in the framework of factory production control by comparing with the results of the performance assessment,

- tests to be carried out in the scope of the factory production control, according to the control plan of the factory control; requirements concerning the frequency and test methods in accordance with the table below.

Product characteristics tested	Test method	Minimum frequency of tests
pH	indicator	for each production
density	MSZ EN 2811- 1:2016	
Emission, Reflection	MSZ EN 12898:2019	every six months
Degree of whiteness	CIE	when changing recipe

3.2.2 Issuing the declaration of performance

The declaration to be issued by the manufacturer must contain the following data detailed in points:

- the identification number of the declaration,
- the individual identification code of the product type,
- the intended use(s) of the construction product specified by the manufacturer,
- the name, the registered trade name, and the registered trademark as well as the mailing address of the manufacturer,
- optionally the name and mailing address of the authorized representative,
- system or systems in relation to the assessment and verification of constancy of performance of the construction products,
- the name of the organization issuing the NMÉ and the identification number of the NMÉ,
- the performance values given in section 2,
- the following sentences:
  - The performance of the product specified in section 1.2 of NMÉ No. A-49/2022 valid from 02.11.2022 complies with the performance specified in the declaration.
  - Exclusively the manufacturer (or the authorized representative) is responsible for issuing this declaration of performance.
- person signing in the name and on behalf of the manufacturer (or the authorized representative) (name/position),
- place/date/signature.

3.3 Tasks of the designated certification body

3.3.1 Assessment of the performance of the product

This NMÉ can be considered as the assessment of the performance of the product in accordance with point 1.6 in Annex V of the European Parliament and Council Regulation No. 305/2011/EU. Therefore, the designated testing organisation shall not undertake this task.

4 ANNEXES

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The NMÉ prepared by:

Brigitta Balogh
technical assessor engineer

Professionally checked and approved by:

Zita Maidics
Product manager

ÉMI ÉPÍTÉSÜGYI MINŐSÉGELLENŐRZŐ INNOVÁCIÓS NONPROFIT KFT.
SZÉKHELY 2000 Szentendre, Dózsa György út 26.
POSTACÍM 2001 Szentendre, Pf.: 180
ADÓSZÁM 20783185-2-13