



TEST REPORT 39/2025

shortened version of the document TEST REPORT 37/2025 Issue 01 on 6.08.2025.,
containing the details data of the test.

TEST METHOD: according to PN-EN 15457:2014-10 (with modification)
Paints and varnishes - Laboratory method for testing the efficacy of film preservatives in a coating against fungi

Type of the method: Semi-qualitative method. Visual assessment.
Description of the method modification: The surfaces of the tested paint samples with ADR technology and without biocides and control samples were exposed to a suspension of mold and yeast spores in a humid environment and incubated without agar medium.

Client/Sample supplier: **ADR System Anna Wosińska**
ul. Św. Ducha 60,
63-200 Jarocin
NIP: 584 040 05 43

Scope of the order: A study of paints with innovative ADR technology under conditions simulating surface exposure to fungi. This study is exploratory in nature and it does not imply it is a complete survey of the issue.

Study description: The surfaces of control and test samples were inoculated with spore suspensions of mold fungi (*Aspergillus niger* and *Cladosporium cladosporioides*) and cell suspensions of yeast fungi (*Aureobasidium pullulans* and *Rhodotorula mucilaginosa*). Each sample was inoculated with 0.3 ml of the aqueous suspension evenly distributed over the sample surfaces and covered with polystyrene foil to maintain sample moisture. The samples were incubated under optimal fungal growth conditions (24±2°C) for 21 days. The results were read after fungal growth appeared on the control samples, i.e., after 7 days. Microscopic observations were performed after 3 weeks. The results are summarized in Tables 2a and 2b.

Type of the test samples: ADR SOL WALLS paint as a dry coating applied on polystyrene foil (5x5 cm)

Type of the control samples: test strains on nutrient agar, polystyrene foil (5x5 cm) and biocide-free paint as a dry coating applied on the polystyrene foil (5x5 cm)

LABORATORY INFORMATION DATA

Name: **M&R LAB**
Microbiology & Research
Renata Szczygłowska
Lipnik 2
Address: **63-507 Kobyla Góra**
695-560-570
Phone: **mr@mikrobiologia.pl**
E-mail:
Date of start the test: 8.08.2024.
Date of end the test: 31.08.2024.

Table 1. Rating scheme for designating the percentage area of disfigurements

| Rating | Rating scheme for designating the percentage area of disfigurements |
|--------|---|
| 0 | No growth on the surface of the specimen |
| 1 | up to 10% growth on the surface of the specimen |
| 2 | more then 10% up to 30% growth on the surface of the specimen |
| 3 | more then 30% up to 50% growth on the surface of the specimen |
| 4 | more then 50% up to 100% growth on the surface of the specimen |

EFFECTIVENESS CRITERION The fungicidal effectiveness of preservatives in the coating is confirmed when treated samples obtain a rating below 4 on the adopted scale, i.e., fungal growth does not exceed 50% of the tested surface compared with control samples.

ASSESSMENT

Table 2a Summary of average test results against mold fungi

| Sample type | Average growth rating | Effectiveness under tested conditions |
|---|-----------------------|---------------------------------------|
| Control (agar) | 4 | - |
| Control (without paint) | 3 | - |
| Biocide-free and ADR SOL WALLS-free paint | 1-2 | - |
| Paint with ADR SOL WALLS | 0 | growth inhibition observed |

Table 2b Summary of mean test results against yeast fungi

| Sample type | Average growth rating | Effectiveness under tested conditions |
|---|-----------------------|---------------------------------------|
| Control (agar) | 4 | - |
| Control (without paint) | 1-2 | - |
| Biocide-free and ADR SOL WALLS-free paint | 1 | - |
| Paint with ADR SOL WALLS | 0 | growth inhibition observed |

FINAL CONCLUSION:

The tests carried out indicate that ADR SOL Walls paint is effective in limiting the growth of molds and yeast fungi under the tested conditions.

Note:

Quantitative studies or studies reflecting operating conditions may provide additional information.

Signature Not Verified

Dokument podpisany przez **RENATA SZCZYGLOWSKA**
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Place, date: Lipnik, 21.08.2025.
Function, Name, Surname and: Scientific Director: Ph.D. dr Renata Szczygłowska

The results refer only to the samples tested and the conditions indicated. In the case, when samples were provided by the Client, the Client is responsible for the sample description, origin, representativeness, and method of collection and delivery.

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END OF REPORT

TEST REPORT 39/2025 Issue 01 of 21.08.2025.

M&R LAB
Microbiology & Research
Renata Szczygłowska
63-507 Kobyla Góra, ul. Lipnik 2
NIP: 772-153-74-49 REGON: 302606950
Bank: Santander 02 1090 1173 0000 0001 4358 6220
mail: mr@mikrobiologia.pl
www.mikrobiologia.pl