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Aschaffenburg, 11 July 2022

From: Bie-schu
Authorized by: Dr. Biester

REPORT

Order No.: 14572/43 **Page 1 of 3 pages**

Client: Hermann Otto GmbH
Krankenhausstraße 14
83413 Fridolfing
Germany

Date of order: 10 March 2022

Receipt of sample material: 11 May 2022

Origin of sample material: From the client

Purpose: Examination of a sealant according to DIN EN ISO 846:2020-11, procedure A and C

(Dr. Derra)
Managing Director

(Dr. Biester)
Dipl.-Biologist
Microbiology
- Head of Department -

The present report exclusively refers to the samples mentioned. It meets the requirements of the DIN EN ISO/IEC 17025:2018 for simplified test reports. Additional information and statistical data on the results are available upon request.

DAkkS
Deutsche
Akkreditierungsstelle
D-PL-14160-01-01
D-PL-14160-01-02

Sample Material

For analysis test pieces of a cured sealant with the following designation were at hand:

Sample 1: OTTOSEAL® S 67, RAL 9010, Lot 20703501

Carrying out of the Tests

Examination period: 11 May 2022 to 08 August 2022

1. Resistance against Moulds (Growth test)

The examination was carried out according to DIN EN ISO 846:2020-11*, procedure A, including a visual and microscopic examination. The examination was carried out as a fivefold determination.

Test specimen:

Dimensions:	5 cm x 5 cm
Deviations from the standard:	none
Cleaning before the examination:	70 % ethanol

Test germs:

Aspergillus niger	(DSM 1957)
Penicillium pinophilum	(DSM 1944)
Paecilomyces variotii	(DSM 1961)
Trichoderma virens	(DSM 1963)
Chaetomium globosum	(DSM 1962)

Incubation conditions: 4 weeks at 29 ± 1 °C

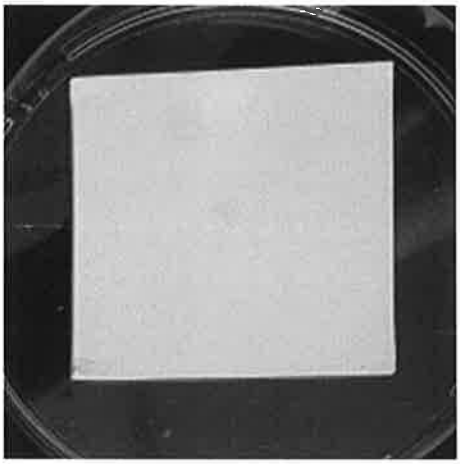
Evaluation of the mould growth:

0	no growth visible under microscopic inspection
1a	no growth visible with the naked eye, but growth clearly visible under the microscope, up to 25 % of the sample surface overgrown
1b	no growth visible with the naked eye, but growth clearly visible under the microscope, up to 50 % of the sample surface overgrown
1c	no growth visible with the naked eye, but growth clearly visible under the microscope, more than 50 % of the sample surface overgrown
2	growth visible with the naked eye, up to 25 % of the sample surface overgrown
3	growth visible with the naked eye, up to 50 % of the sample surface overgrown
4	considerable growth, more than 50 % of the sample surface overgrown
5	strong growth, whole sample surface overgrown

Results:

Individual evaluation of the test specimen:	5 x growth intensity 0
Overall evaluation of the sample:	growth intensity 0
Further observations:	none

after 4 weeks of incubation



2. Resistance against Bacteria

The examination was carried out according to DIN EN ISO 846:2020-11*, procedure C, including a visual and microscopic examination. The examination was carried out as a fivefold determination. The evaluation was carried out by looking at the bacterial growth in the mineral salt agar surrounding the test specimen.

Test specimen:

Dimensions:	5 cm x 5 cm
Deviations from the standard:	none
Cleaning before the examination:	70 % ethanol
Test germ:	*Pseudomonas aeruginosa* (DSM 1253)
Incubation conditions:	4 weeks at 29 ± 1 °C

Results:

Individual evaluation of the test specimen:	5 x increased growth
Overall evaluation of the sample:	increased growth
Further observations:	none

The accreditation applies to the methods marked with * in the test report (Register no. D-PL-14160-01-01).
End of report