



NATIONAL RESEARCH CENTRE
TAHRIR St. DOKKI, CAIRO, EGYPT
Central Unit For Analysis And
Scientifical Services (CUASS)
Material Test Lab.

المركز القومي للبحوث
الدقى . القاهرة . جمهورية مصر العربية
وحدة التحاليل و الخدمات العلمية المركزية
معمل اختبار المواد



Test Report

Report No.

MO1 7007 11 2021

Client

CHEMA FOAM CO.

Authority & date

Request Orders 18/11/2021

Items Tested

Chema-Adhesive 102 Grey

Results

The detailed test results are given on the following pages of this report (5 pages) .

Report Typist

*** Mis. Naglaa Mohamed-Sara Abdel Reheam
Noha Samir**

Test carried by

*** Mis . Fatma El Zahraa Fikry**

*** H.Eng. Ahmed Said**

*** Chem. Amr El Shafey**

*** Dr. Abou El Ftouh Abd El Hakem**

Authorized by

Prof. Dr. Mostafa Zaki Mostafa

*** The Supervisor of ceramics, Polymer and
Solid Matter Department.**

*** Management Representative and Quality
Assurance Manager.**

Issue date

21/12/2021

**Condition of Test
& Issue**

*The test speciemen was conditioned at 23 °C
with a humidity of 60 % and the needed
calibrations as well as balancing of the all
used machines were always done .*





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To / CHEMA FOAM CO.

Dear Sir.,

With correspondence to your request dated 18/11/2021 concerning the testing sample of Chema-Adhesive 102 Grey , We would like to inform you that the all following needed tests were carried out which namely:

- 1- Initial tensile adhesion strength test after 28 days (Regular condition) - according to EN 12004-2-2017
- 2- Tensile adhesion strength test after 20 days water immersion according to EN 12004-2-2017
- 3- Tensile adhesion strength test after 14 days heat ageing at 70°C according to EN 12004-2-2017
- 4- Open time test according to EN 12004-2-2017
- 5- Vertical slip test according to EN 12004-2-2017

We would like to inform you that the needed test was carried out taking into consideration the following conditions :

- 1- In all mechanical properties GALDABINI – QUASAR 600 – Made In Italy Universal Testing Machine was used This type has a self calibration , zero adjusting and automatic balance , which are done daily before testing or during testing this testing instrument is accompanied by a highly reliable system for evaluating the mechanical properties .
- 2- Measuring drum of sensitivity $\pm 0.01\text{mm}$ was used for dimensions evaluation.
- 3- On heating a Memmert West Germany oven was used .
- 4- Weighing Balance with tolerance + 0.0001 g was used in determining the weights .
- 5- JSR digital water bath model JSWB - 30T made in Korea .
- 5- All used Machineries and apparatuses were calibrated periodically

The following tables give the obtained results representing the sample delivered from your company .





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Test results on a sample of Chema-Adhesive 102 (Grey)

Delivered from CHEMA FOAM CO.

1- Initial tensile adhesion strength test after 28 days

(Regular condition) - according to EN 12004-2-2017

No.	Results (N/mm ²)	The mean value (N/mm ²)	EN 12004 C2 limit (N/mm ²)
1	1.01	1.00	≥ 1.0
2	0.99		
3	0.98		
4	1.03		
5	1.01		

* Failure pattern CF-A

2- Tensile adhesion strength test after 20 days water immersion
according to EN 12004-2-2017

No.	Results (N/mm ²)	The mean value (N/mm ²)	EN 12004 C2 limit (N/mm ²)
1	0.93	0.96	≥ 1.0
2	0.97		
3	0.97		
4	0.96		
5	0.98		

* Failure pattern CF-A





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Test results on a sample of Chema-Adhesive 102 (Grey)

Delivered from CHEMA FOAM CO.

3- Tensile adhesion strength test after 14 days heat ageing at 70°C

according to EN 12004-2-2017

No.	Results (N/mm ²)	The mean value (N/mm ²)	EN 12004 C2 limit (N/mm ²)
1	0.89	0.93	≥ 1.0
2	0.93		
3	0.97		
4	0.94		
5	0.91		

* Failure pattern CF-A

4- Open time test according to EN 12004-2-2017

Open time = 39 min

EN 12004 T limit ≥ 30min

5- Vertical slip test according to EN 12004-2-2017

Vertical slip = 0.50 mm

EN 12004 E ≤ 0.5mm

* The sample conform with EN 12004 C2 T E





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*This report was given to you representing only the results for the testing sample of Chema-Adhesive 102 Grey , Delivered from CHEMA FOAM CO., These results and conclusions were given to you without any responsibility on **THE CERAMICS, POLYMERS AND SOLID MATTER DEP. of THE MATERIAL TEST LAB in THE NATIONAL RESEARCH CENTRE** for pick up the samples to be tested .*

**Head of Director of The Board of Central Department
for Scientifical Analysis and Tests**

&

SUPERVISOR
**OF CERAMICS, POLYMER AND
SOLID MATTER DEPARTMENT**

PROF.DR. MOSTAFA ZAKI MOSTAFA

