



NATIONAL RESEARCH CENTRE
TAHRIR St. DOKKI, CAIRO, EGYPT
Central Unit For Analysis And
Scientific 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 1564 05 2023

Client

SCIB Chemicals S.A.E

Authority & date

Request Orders 1/5/2023

Items Tested

SmartCare Tile Adhesive flex 220

Results

The detailed test results are given on the following pages of this report (6 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

7/6/2023

**Condition of Test
& Issue**

The test specimen 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 / SCIB Chemicals S.A.E

Dear Sir.,

With correspondence to your request dated 1/5/2023 concerning the testing sample of SmartCare Tile Adhesive flex 220 , 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- Tensile adhesion strength test after freeze- thaw cycle (25 cycles) according to EN 12004-2-2017
- 5- Open time test according to EN 12004-2-2017
- 6- 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 $+ 0.0001\text{ g}$ 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 SmartCare Tile Adhesive flex 220

Delivered from SCIB Chemicals S.A.E

1- Initial tensile adhesion strength test after 28 days

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

No.	Results (N/mm2)	The mean value (N/mm2)	EN 12004 C2 limit (N/mm2)
1	1.12	1.13	≥ 1
2	1.17		
3	1.13		
4	1.07		
5	1.15		

* Failure pattern CF-A

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

No.	Results (N/mm2)	The mean value (N/mm2)	EN 12004 C2 limit (N/mm2)
1	1.22	1.30	≥ 1
2	1.29		
3	1.33		
4	1.31		
5	1.34		

* Failure pattern CF-A



شارع التحرير - الدقى - القاهرة

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مباشر
فاكس

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داخلى

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E-mail : nrc1302a@yahoo.com

Test results on a sample of SmartCare Tile Adhesive flex 220

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

according to EN 12004-2-2017

No.	Results (N/mm2)	The mean value (N/mm2)	EN 12004 C2 limit (N/mm2)
1	1.11	1.11	≥ 1
2	1.07		
3	1.05		
4	1.14		
5	1.19		

**** Failure pattern CF-A***

4- Tensile adhesion strength test after freeze- thaw cycle (25 cycles)

according to EN 12004-2-2017

No.	Results (N/mm2)	The mean value (N/mm2)	EN 12004 C2 limit (N/mm2)
1	1.01	1.04	≥ 1
2	1.07		
3	1.08		
4	1.03		
5	1.01		

**** Failure pattern CF-A***





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

Open time = 44 min

EN 12004 E limit $\geq 30\text{min}$

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

Vertical slip = 0.21 mm

EN 12004 T limit $\leq 0.5\text{mm}$

*** The sample conform with EN 12004 C2 TE**





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*This report was given to you representing only the results for the testing sample of SmartCare Tile Adhesive flex 220 , Delivered from SCIB Chemicals S.A.E , 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 Scientific Analysis and Tests**

&

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

PROF.DR. MOSTAFA ZAKI MOSTAFA



2023

