

Test Report on Adhesion Strength

Client	SCIB Paints 6th of October city ,Egypt	Lab Report NO.	SPC 22-104/12
Project Name	N.G	Sample No.	SPC22-104/5
Samole Description	DB2K-700	Date Recived	24/2/2022
Source	SCIB Paints	Casting Date	25/2/2022
Client Reference	N.G	Date Tested	15/3/2022
Test Method	ASTM D4541-17	Date Reported	20/3/2022
Test Type	Type 5-Self Aligmining Tester	Substrate Used	Concrete
Location	In SPC lab.	Adhesive used	Two component epoxy
Sampling Conducting	Temp, 23c Relative Humidity 50%	Tested By	ossama

Test Procedure

The general pull –off tested is performed by securing aloading fixture (dolly,stud)normal (perpendicular) to the surface of the coating with an adhesive . After the adhesive is cured attested apparatus is attached to the loading fixture and aligned to apply tension normal to the surface .The force applied to the loading fixture is then gradually increased and monitored until either aplug of material is detedcted or specified value is reached . When aplug of material is detached the exposed surface repretends the plane of limiting strength within the system.

The nature of the failure is qualified in accordance with the percent of adhesive and failure , and the actual interface and layers involved.

The pull –off strength is comuted based on the maximum indicated loa

Description	Results		
	Samle 1	Sample 2	Sample 3
Test number			
Diameter of Dolly (mm)	20	20	20
Test position	Vertical	Vertical	Vertical
Pull off strength (N/mm ²)	2.63	2.65	2.71
Average pull off strength (N/mm ²)	2.7		
Mode of Failure	Failure Observed from sample		

SPC Director

Prof. Dr. Ashraf EL-said




Test Report on Carbon dioxide diffusion

Customer Name	SCIB Paints 6 th of October city ,Egypt
Sample name	DB2K-700
Test Method	BS EN 1062-6: 2002
Specimen Thickness(mm)	202
Room Temperature	23 C
Room Relative Humidity	50%

Test Results

Test	Results
Average Carbon Dioxide Permeability	0.275g/m ² day
Diffusion equivalent air Layer thickness SD	1080 m
Carbon dioxide diffusion coefficient of the coating	2.24 x 10 ⁴
Classification of coating material and coating	C1

SPC Director

Prof. Dr. Ashraf EL said



Ashraf EL said

Test Report on Depth of penetration of water under positive pressure

Client	SCIB Paints	Lab Report NO.	SPC 22-104/10
Adress	6th of October city ,Egypt	Sample No.	SPC22-104/3
Contractor	N.G	Date Reported	25/4/2022
consultant	N.G	Sample certificate	N.G
Project name	N.G	Sample cast on	25/2/2022
Sample description	DB2K-700	Date test started	2/3/2022
Source/manufacture	SCIB Paints	Date test completed	6/3/2022
Sample received date	24/2/2022	Sampling method	N.A
Mositure content	N.A	Sample size mm	150X150cm
Surface treatment done	By SPC lab.	Age of test	N.A
Test Method	DIN 1048	Requard test Age	72 hours
Concrete Mix Grade	N.A	Pressure Applied	5 Bar

Test Results

Sample Reference	SPC22-104/3		
Client Reference	1	2	3
Apperance of Specimen	Good	Good	Good
Direction of application of water pressure with respect to the casting direction	As per standard	As per standard	As per standard
Observation of pressure of water leakage on the surface of sample during test	No leakage	No leakage	No leakage
Water penetration depth (Max.) mm	Nil	Nil	Nil



SPC Director

Prof. Dr. Ashraf EL-Said

A. EL-Said

Test Report on Crack Bridging Ability

Client	SCIB Paints 6th of October city ,Egypt	Lab Report NO.	SPC 22-104/11
Project Name	N.A	Sample No.	SPC22-104/4
Samole Desscription	DB2K-700	Date Recived	24/2/2022
Source	SCIB Paints	Casting Date	25/2/2022
Client Reference	N.G	Date Tested	15/3/2022
Test Method	ASTM C1305/C1305M-16	Date Reported	20/3/2022
Nature of substrate	Concrete	No. of cast & Method of application	One coat
Substrate Dimenstion(mm)	75 x 50	Coating Thickness	1mm
Sampling Condicting	Temp, 23c Relative Humidity 50%	Tested By	ossama

Test Results

Test	Crack width at which first failure in the coating occurred (mm)
Crack bridging Ability	1.4
Recommendation	

SPC Director

Prof. Dr. Ashraf EL-Said




Test Report on Elongation

Customer Name	SCIB Paints 6 th of October city ,Egypt
Sample name	DB2K 700
Test Method	ASTM D 2370
Dry Film Thickness	2mm
Room Temperature	23 C
Room Relative Humidity	50%

Test Results

Test	Results		
Elongation%	Sample 1	Sample 2	Average
	0.61	0.59	0.6

SPC Director

Prof. Dr. Ashraf EL-said




Test Report on Tensile strength

Customer Name	SCIB Paints 6 th of October city ,Egypt
Sample name	DB2K 700
Test Method	ASTM D 2370
Dry Film Thickness	2mm
Room Temperature	23 C
Room Relative Humidity	50%

Test Results

Test	Results		
Tensile strength	Sample 1	Sample 2	Average
	1.51 N/mm ²	1.49 N/mm ²	1.5 N/mm ²
Recommendation	pass	pass	pass



SPC Director

Prof. Dr. Ashraf EL-said



HEAVY METAL REPORT

This table shows determination of heavy metals in DB2K 700 sample produced by SCIB Company after immersed in distilled water according to standard ES 190 to apply potable water resist.

No	Heavy metal Concentration	Limits	Unit	Results	Decision
1	PH	7+- 0.6		7.3	pass
2	Iron (Fe) conc.	≤ 0.3	mg/l	≤ 0.04	pass
3	Copper (Cu) conc.	≤ 2		≤ 0.006	pass
4	Zinc(Zn) conc.	≤ 3.0		≤ 0.002	pass
5	Nickel (Ni) conc.	≤ 0.02		≤ 0.000	pass
6	Cadmium (Cd) conc.	≤ 0.003		≤ 0.00	pass
7	Manganese (Mn) conc.	≤ 0.4		≤ 0.007	pass
8	Lead (pb) conc.	≤ 0.01		≤ 0.000	pass
9	Arsenic (As) conc.	≤ 0.01		≤ 0.000	pass
10	Mercury(Hg) conc.	Zero		≤ 0.000	pass

The sample is accept according to potable water standard requirments

Spc Director

Prof. Ashraf EL-said






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

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معمل اختبار المواد



Test Report

Report No.

MO1 0960 02 2023

Client

SCIB Chemicals S.A.E

Authority & date

Request Orders 1/2/2023

Items Tested

Smart care DB2K 700

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

18/4/2023

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 1/2/2023 concerning the testing sample of Smart care DB2K 700 , We would like to inform you that the all following needed tests were carried out which namely:

- 1- Adhesion strength test to concrete (Pull-off) after 28days according to ASTM D4541**
- 2- Tensile strength test after 28days according to ASTM D2370**
- 3- Crack bridging test according to ASTM C1305**
- 4- Depth of water Penetration test according to EN 12390-8**
- 5- Co2 permeability according to EN 1062-6**
- 6- Toxicity Effect Test**

By using microtox model LX according to Standard Method For Examination Of Water and Waste Water , BS 6920 , BS EN ISO 11348-3

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 $\pm 0.01mm$ 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- All used Machineries and apparatuses were calibrated periodically.

The following table gives the obtained results representing the sample delivered from your company .



Test results on a sample of Smart care DB2K 700

Delivered from SCIB Chemicals S.A.E

1- Adhesion strength test to concrete (Pull-off) after 28days

according to ASTM D4541

No.	Adhesion strength (N/mm ²)	Mean (N/mm ²)
1	1.17	1.15
2	1.09	
3	1.18	
4	1.11	
5	1.19	

2- Tensile strength test after 28days according to ASTM D2370

No.	Tensile strength (N/mm ²)	Elongation (%)
1	7.01	28.93
2	7.25	30.13
3	6.93	33.67
4	6.11	30.11
5	6.92	29.53
Mean	6.84	30.47

3- Crack bridging test according to ASTM C1305

No.	No. of cycles	Maximum (mm) movement	Observation
1	10	0.5	No failure
2		0.5	
		0.5	

** The sample resist the crack (0.5 mm) without any observable changed*



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Test results on a sample of Smart care DB2K 700

Delivered from SCIB Chemicals S.A.E

4- Depth of water Penetration test according to EN 12390-8

<i>Time (hrs)</i>	<i>Pressure (bar)</i>	<i>Thickness (mm)</i>	<i>Penetration (mm)</i>	
			<i>Control</i>	<i>Sample</i>
72	5	2	43.7	21.8

5- Co2 permeability according to EN 1062-6

Co2 permeability = 13.8 g/m2.d

6- Toxicity Effect Test

*By using Microtox model LX the sample found to have no toxicity effect
on drinking water, and suitable for use in drinking water (EC50 > 100) .*





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*This report was given to you representing only the results for the testing sample of Smart care DB2K 700 , 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 Scientifical Analysis and Tests**

&

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

PROF.DR. MOSTAFA ZAKI MOSTAFA



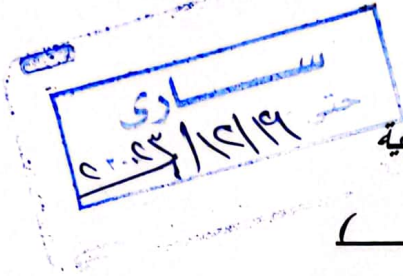
2073



National Organization
For Potable Water & Sanitary Drainage
Administration of Testing & Industry Supervision



الهيئة القومية
لمياه الشرب والصرف الصحي
إدارة الاختبارات والرقابة على الصناعة



شهادة اعتماد منشأة إنتاجية

(مواد العزل والدهانات)

اسم المنشأة : شركة سكيب للكيماويات
عنوان الإدارة : قطعة رقم ٣/١/ب - المنطقة الصناعية الرابعة - ٦ أكتوبر - محافظة الجيزة
عنوان المصنع : قطعة رقم ٣/١/ب - المنطقة الصناعية الرابعة - ٦ أكتوبر - محافظة الجيزة
السجل التجاري : ١٠٢٥ مكتب سجل تجاري : استثمار القاهرة محافظة : القاهرة
ب-ض رقم تسجيل ضريبي : ١٠٠-٣٩٩-٥٦٨ مأمورية : كبار ممولين محافظة : القاهرة
سجل صناعي رقم : ٥٣٤ ١٠٢٦ ٠٤٢٧ ٠٦١٨ سنة الإصدار : ١٩٩٨ نوعية الصناعة : كيماوية
رخصة : ٢٩ ٠٠٠ ١٧١٢١٩ ١٢٢٠ في ١٩/١٢/٢٠١٧ (مدينة) : ٦ أكتوبر
موافقة شئون البيئة : خطاب رقم القرار : ٥٩٦١ التاريخ ٢٠٠٩/١٢/٢ الجهة : جهاز شئون البيئة

أهم المنتجات المعتمدة لدى الهيئة :-

- ١- دامب بلوك 2K 600 (عازل اسمنتي لتتكات مياه الشرب)
- ٢- دامب بلوك 2K 700 (عازل اسمنتي لتتكات مياه الشرب)
- ٣- دامب بلوك 2K 800 (عازل اسمنتي لتتكات مياه الشرب)

• طبقا للمواصفات القياسية المصرية والعالمية

• يتم الالتزام بتعليمات الادارة والموضحة خلفه وفي حاله مخالفتها يعتبر لاغبي

• شهادة الاعتماد لا يعمل بها كبديل عن شهادات الاختبار التي تصدر لكل أمر توريد على حده

المشرف العام
محمد لبيب
٢٠١٩/١٢/٠٤
"محمود عبد الحميد المزين"



صادر في ٢٠١٩/١٢/٠٤
ساري حتى ٢٠١٩/١٢/٠٤

shereen

٢٠١٩/١٢/٠٤