



مختبرات ويمبي ش.ذ.م.م.
WIMPEY LABORATORIES L.L.C.

LABORATORY REPORT

Kadisco Paint & Adhesive Industry S.C
Dubai, UAE

Report No: WD-R-231021-0714
Sample No: WD-S-231021-0695
Date of Report: 11/11/2023

Introduction: Further to the request received from M/s. Kadisco Paint & Adhesive Industry S.C dated 23rd September 2023; the sample of Paint was tested for below parameters.

Sample Type : Paint
Request No : WD-Q-231021-0131
Sample Received Date : 23/10/2023.
Date Tested : 23/10/2023-11/11/2023.
Tested By : MR

General Information

Name of the Product : Apcolite Mica

Result of Analysis

Test	Method	Unit	Result
VOC	USEPA 24	g/L	<1
Alkylphenol ethoxylates (APEOs)	ASTM D4252-89	ppm	<1

Remarks: None

Signed for and on behalf of Wimpey Laboratories LLC

Arya Rajeev
Chemist

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.
-End of text-





مختبرات ويمبي ش.ذ.م.م.
WIMPEY LABORATORIES L.L.C.

TEST REPORT ON SCRUB RESISTANCE

Customer Name	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Sample Description	Kadisco Acrylic Primer + Apolite Mica Emulsion	Lab Report No.	WD-R-231023-0645/1
Source	N.G	Lab Request No.	WD-Q-231023-0163
Test Method	DIN 53778	Sample No.	WD-S-231023-0614
Test Temperature	23°C & 50% RH	Date Received	23/10/2023
Tested Location	Wimpey-Dubai	Casting Date	28/10/2023
Wimpey Ref No.	23102331	Date Tested	04/11/2023
Tested By	SU	Date Reported	14/11/2023

Test Results

Test	Result
Scrub Resistance	15000 Cycles

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C.


S. Sarath Kumar
Head of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.





TEST REPORT ON TENSILE STRENGTH

Client	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Sample Description	Kadisco Acrylic Primer + Apcolite Mica Emulsion	Lab Report No.	WD-R-231023-0645/2
Source	N.G	Lab Request No.	WD-Q-231023-0163
Curing and test condition	Temperature: 23°C Relative Humidity: 50%	Sample No.	WD-S-231023-0614
Sampling Method	ASTM D412-16(2021)	Date Received	23/10/2023
Test Method	ASTM D412-16(2021)	Casting Date	28/10/2023
Specimen Type	Test Method A – Die C	Curing Time	7 DAYS
Rate of Speed	500 mm/minute	Date Tested	04/11/2023
Wimpey Ref No.	23102331	Date Reported	14/11/2023
Tested By	PK		

Test Results

Specimen Number	Width (mm)	Thickness (mm)	Maximum Force (N)	Tensile Strength (N/mm ²)	Elongation %
1	25.0	0.15	13.3	3.55	56.3
2	25.0	0.14	12.1	3.44	51.3
3	25.0	0.16	12.2	3.05	51.9
4	25.0	0.14	11.9	3.40	52.4
5	25.0	0.14	11.8	3.36	56.8
Average				3.36	53.7

Remarks: None

Signed for and on behalf of Wimpey Laboratories L.L.C.

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.





TEST REPORT ON VOLUME SOLIDS

Client	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Project Name	N.G	Lab Report No.	WD-R-231023-0645/3
Sample Description	Kadisco Acrylic Primer + Apcolite Mica Emulsion	Lab Request No.	WD-Q-231023-0163
Source	N.G	Sample No.	WD-S-231023-0614
Client's Ref.	N.G	Date Received	23/10/2023
Test Method	ASTM D2697-03(2021)	Date Tested	28/10/2023
Receptacle Used	Metal Disc	Date Reported	14/11/2023
Immersion Liquid Used	Distilled Water	Cast Date	28/10/2023
Type of Air oven used	Hot Air oven	Room Temperature	23°C
Method of Coating Receptacle	By Dipping	Relative Humidity	50%
Drying Type	1 hour flash dry at 105°C	Sample brought in by	Client
Wimpey Lab Ref No.	23102331	Tested By	PK

Test Results

Specimen Number	Unit	Result
1	%	38.36
2		35.76
3		39.55
Average		37.89

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C.

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.



TEST REPORT ON CRACK BRIDGING ABILITY

Client	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Sample Identification	N.G	Lab Report No.	WD-R-231023-0645/5
Sample Description	Kadisco Acrylic Primer + Apcolite Mica Emulsion	Lab Request No.	WD-Q-231023-0163
Source	Kadisco Paint and Adhesive Industry S.C	Sample No.	WD-S-231023-0614
Test Specification	EN 1062-1:2004	Wimpey Ref No.	23010340
Test Method	EN 1062-7:2004	Date Received	23/10/2023
Nature of Substrate	Concrete	Date Tested	04/11/2023
Substrate Dimension(mm)	50 W x 75 L	Date Reported	14/11/2023
No. of coat & Method of application	2 Coat, Brush	Cast Date	28/10/2023
Test Condition	Temperature: 23°C Relative Humidity: 50%	Tested By	PK

Test Results

Test	Crack Width (mm)	Observation
Crack Bridging Ability	1.10	No sign of cracks, loss of adhesion or any other type of failure was observed after completion of the up and down movement.

Remarks: None.

Signed for and on behalf of Wimpey Laboratories L.L.C

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of text-





TEST REPORT ON PULL-OFF ADHESION STRENGTH

Customer Name	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Project Name	N.G	Lab Report No.	WD-R-231023-0645/4
Sample Description	Kadisco Acrylic Primer + Apcolite Mica Emulsion	Lab Request No.	WD-Q-231023-0163
Source	Kadisco Paint and Adhesive Industry S.C	Sample No.	WD-S-231023-0614
Test Method	ASTM D4541-22	Wimpey Ref No.	23102331
Machine Details	Manufacturer: Elcometer Model: 510-50T Serial Number: WA 22213	Date Received	23/10/2023
Location	In-House	Date Tested	04/11/2023
Test Temperature & Relative Humidity	23°C & 50%	Date Reported	14/11/2023
Substrate Used	Concrete	Cast Date	28/10/2023
Adhesive Used	Two Component Epoxy	Curing Condition	7 days at 23°C
Tested By	SU		

Test Procedure

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

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

The pull-off strength is computed based on the maximum indicated load

Description	RESULTS		
Test Number	1	2	3
Test Position	Vertical	Vertical	Vertical
Size of Dolly (mm)	20	20	20
Max. Load Applied (N)	628.0	825.8	778.7
Pull off Strength (N/mm ²)	2.00	2.63	2.48
Average Pull off Strength (N/mm ²)	2.37		
Mode of Failure	100% Failure observed from Concrete		

Remarks: None

Signed for and on behalf of Wimpey Laboratories LLC

S.Sarath Kumar
Head of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.





TEST REPORT

Kadisco Paint & Adhesive Industry S.C.
Al,Quoz,Dubai
UAE

Report No: WD-R-231021-0727
Sample No: WD-S-231021-0710
Report Date: 23/11/2023

Sample Description : Apcolite Mica Emulsion
Batch Number : N/A
Manufacture date : N/A
Sample Received : 21/10/2023.
Test Date : 21/10/2023 to 23/11/2023.
Test Conducted By : DI

1.0 Introduction:

Further to the requisition received from **M/s Kadisco Paint & Adhesive Industry S.C.** dated **21st October 2023**, the sample of Apcolite Mica Emulsion was tested.

2.0 Test method reference:

ASTM G22-23; Standard Practice for the determining Resistance of Plastics to Bacteria.

3.0 Methodology:

The test method describes a series of tests which includes,

1. Selection of suitable specimens for determinations of pertinent properties.
2. Inoculation of the specimens with suitable organisms.
3. Exposure of the inoculated specimens under conditions favorable to growth.
4. Examination and rating for visual growth.
5. Removal, sterilization, and evaluation of specimens.

A medium with bacterial suspension (*Pseudomonas aeruginosa* ATCC 27853) is poured on sterile nutrient agar plates, the specimens to be tested are places over this hardened agar.

The plates are incubated at 35°C to 37°C and not less than 85% relative humidity for 21 days.

The result of growth was estimated by the presence and the absence of observed growth.

4.0 Test Results

Test Duration	Observation	Result
Week # 1	No growth observed	PASS
Week # 2	No growth observed	
Week # 3	No growth observed	



5.0 Conclusion

No physical change in the tested specimen was observed. Further not much visual growth was evident from the sample tested, suggesting that the analyzed sample is resistant to bacterial growth under the test conditions recommended.

Signed for and on behalf of Wimpey Laboratories

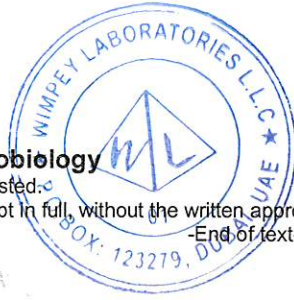
Shamna Salamuddin

Head of the Department - Microbiology

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the Laboratory.

-End of text-





TEST REPORT

Kadisco Paint & Adhesive Industry S.C.
Al,Quoz,Dubai
UAE

Report No: WD-R-231021-0727
Sample No: WD-S-231021-0710
Report Date: 23/11/2023

Sample Description : Apcolite Mica Emulsion
Batch Number : N/A
Manufacture date : N/A
Sample Received : 21/10/2023.
Test Date : 21/10/2023 to 23/11/2023.
Test Conducted By : DI

1.0 Introduction:

Further to the requisition received from **M/s Kadisco Paint & Adhesive Industry S.C.** dated **21st October 2023**, the sample was tested for Antifungal study.

2.0 Test method reference:

ASTM G21; Standard Practice for the determining Resistance of Synthetic Polymeric Materials to Fungi.

3.0 Methodology:

The test method involves the following.

1. Selection of suitable specimens for determinations of pertinent properties.
2. Inoculation of the specimens with suitable organisms.
3. Exposure of the inoculated specimens under conditions favorable to growth.
4. Examination and rating for visual growth.

The prepared sample and the controls of the same substrate were placed on to nutrient agar with sufficient nutrient salts. The spores of the inoculum were sprayed with the help of sterilized atomizer so that the entire surface is moistened with the spore suspension.

The plates were incubated at 28°C to 30°C and not less than 85% relative humidity for 26-28 days.

The results were reported by rating the growth for a period of 4-weeks. Traces of growth was estimated on "0 to 4" rating scale, in such a way that the value of "4" is taken as heavy growth and a value of "0" as no growth.

Observed colonies on test specimens	Rating
None (sterile)	0
Trace of growth (less than 10%)	1
Light growth (10 to 30% colonies)	2
Medium growth (30 to 60%)	3
Heavy growth(60% to complete coverage)	4

Fungal cultures used to prepare the test culture are *Aspergillus niger*, *Penicillium pinophilum*, *Chaetomium globosum*, *Gliocladium virens* and *Aureobasidium pullulans*.



4.0 Test Results

Test Duration	Observation/Result	Rating
Week # 1	No Growth (None)	0
Week # 2	No Growth (None)	0
Week # 3	No Growth (None)	0
Week # 4	No Growth (None)	0
Final Rating as per ASTM	0	

5.0 Conclusion

Final rating scale of **0** as per ASTM G21, indicates that analyzed sample have a good resistance to Mold growth under the controlled test conditions.

Signed for and on behalf of Wimpey Laboratories


Shamna Salamuddin

Head of Microbiology Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the Laboratory.

-End of text-





TEST REPORT ON WEATHERING RESISTANCE

Client	Kadisco Paint and Adhesive Industry S.C P.O Box: 120919 Ethiopia		
Sample Identification	N.G	Lab Report No.	WD-R-231023-0645/6
Sample Description	Kadisco Acrylic Primer + Apolite Mica Emulsion	Request No.	WD-Q-231023-0163
Source	Kadisco Paint and Adhesive Industry S.C	Sample No.	WD-S-231023-0614
Test Method	ASTM G154-23	Date Received	23/10/2023
Test Procedure	ASTM G151-19	Cast Date	N.G
Evaluation Test Method	ASTM D714-02(2017)	Date Tested	04/11/2023-16/12/2023
Devise Type	Weathering Apparatus	Date Reported	18/12/2023
Light Source	UVA-340	Room Temperature & Relative Humidity	23°C & 50%
Cycle	8 hours UV at 60°C and 4 hours condensation at 50°C	Sample brought in by	Client
Exposure Duration	1000 Hours	Tested By	RB

Test Results

Test	Observation
Artificial Weathering (1000 Hours)	No cracking, No chalking, No flaking, No wrinkling, No color change and No blistering was observed

Remarks: Sample photos attached in Annex A.

Signed for and on behalf of Wimpey Laboratories L.L.C

S. Sarath Kumar
Head of Department

Test results relate only to the samples tested.

This report shall not be reproduced except in full, without the written approval of the laboratory.

-End of Text-





مختبرات ويمبي ش.ذ.م.م.
WIMPEY LABORATORIES L.L.C.

IAS

ACCREDITED
Testing Laboratory
TL-564

Report Number: WD-R-231023-0645/6

Sample Number: WD-S-231023-0614

ANNEX - A TEST PHOTOS



Before Test



After Test

