BIOTECH TESTING SERVICES

TEST REPORT

LAB NO. : 2102281/ 3	DATE: 24/08/2021

NAME OF CUSTOMER : GREENLAM INDUSTRIES LIMITED

ADDRESS : Vill. Paterh Bhonku, PO Panjehra,
Teh. Nalagarh, Distt. Solan,
Himachal Pradesh – 174 101

REFERENCE : Letter Ref. Nil dated July 09, 2021
K. Attention: GSRA Sharma/ Ankush kumar

DATE OF RECEIPT : 09/07/2021

DATE OF INITIATION : 11/07/2021

DATE OF COMPLETION : 20/08/2021

SAMPLE DESCRIPTION : LAMINATE SAMPLE LABELED AS:-

Sr. No.	Description
3.	Greenlam 1.0mm HPL, Décor No.#269 Suede Finish; 3774 – Treated
Untreated lab control	

Test Standard:

Customer specified method to determine Fungus Resistance property of Synthetic Polymeric materials to Fungi; E 01 1269/ Equivalent to ASTM: G 21 – 15

Test Scope:

This standard covers determination of the effect of Fungi on the properties of Synthetic polymeric material

Experimental Conditions:

Size of Test specimen	: 50 mms x 50 mms
No of replicates	: Three
Positive Lab Control	: Sterile Filter paper
Media used	: Nutrient Salt agar
Temperature	: $28^0C \pm 1^0C$
Humidity	: > 85% Relative Humidity
Duration of Exposure	: 28 days

104/105, Malwa, Patanwala Ind. Estate, L.B.S. Marg, Ghatkopar (W), Mumbai - 400086, INDIA • Tel. : +91-22-2500 2811, 2500 2812
Email : info@biotechts.in / report@biotechts.in / biotechtestingservices@gmail.com / shilpanair@biotechts.in

Procedure:

Specimens of size 50 mms x 50 mms were placed on Nutrient salt agar. Composite spore suspension as listed below was sprayed on specimen. The Nutrient salt agar provides all of the trace nutritional elements needed by Fungi except Carbon source. Fungus grows only when it is able to use polymeric material as Primary carbon source. Inoculated samples were incubated and examined for fungal growth. Temperature and humidity were maintained for the duration of the test. Adequate positive and Negative controls were also included along with specimen.

Mixed spore suspension of –

1. Aspergillus niger ATCC 9642
2. Penicillium pinophilum ATCC 11797
3. Gliocladium virens ATCC 9645
4. Chaetobium globosum ATCC 6205
5. Aurobasidium pullulans ATCC 15233

Results:

Observations were made on weekly basis for appearance for the density of fungal growth. The filter paper control pieces had copious fungal growth at 2 weeks.

At 4th week, samples were rated "0" or "1" were examined microscopically to confirm the Ratings

Rating scale for the test is as follows:

Growth on specimen	Rating
None	0
Trace of Growth (< 10 %)	1
Light Growth (10 to 30 %)	2
Medium Growth (30 to 60 %)	3
Heavy Growth (60% to complete coverage)	4

Sample Identification	Duration of the Test				
	Replicates	Week 1	Week 2	Week 3	Week 4
Greenlam 1.0mm HPL, Décor No.#269 Suede Finish; 3774 - Treated	Set I	0	0-1	0-1	0-1
	Set II	0	0-1	0-1	0-1
	Set III	0	0-1	0-1	0-1
Control	-	1	3	4	4

Sample at; 4 weeks

104/105, Malwa, Patanwala Ind. Estate, L.B.S. Marg, Ghatkopar (W), Mumbai - 400086, INDIA • Tel. : +91-22-2500 2811, 2500 2812
Email : info@biotechts.in / report@biotechts.in / biotechtestingservices@gmail.com / shilpanair@biotechts.in

BIOTECH TESTING SERVICES

INTERPRETATION:

Test sample labeled as Greenlam 1.0mm HPL, Décor No. #269 Suede Finish; 3774 - **Treated** is **Resistant to fungal attack** at the end of 28 days of incubation when tested as per specified method.

For BIOTECH TESTING SERVICES

BIOTECH TESTING SERVICES BTS MUMBAI

Dr Shilpa U. Nair
Quality Manager
(Authorized Signatory)

104/105, Malwa, Patanwala Ind. Estate, L.B.S. Marg, Ghatkopar (W), Mumbai - 400086, INDIA • Tel. : +91-22-2500 2811, 2500 2812
Email : info@biotechts.in / report@biotechts.in / biotechtestingservices@gmail.com / shilpanair@biotechts.in