



# BIOTECH TESTING SERVICES

## TEST REPORT

LAB NO. : 2102281/ 1 - 4

DATE: 12/08/2021

**NAME OF CUSTOMER** : GREENLAM INDUSTRIES LIMITED  
**ADDRESS** : Plot no. E - 176/179, Phase-II, RIICO Industrial Area,  
P.O Behror, Dist. Alwar  
**REFERENCE** : Letter Ref. Nil dated July 12, 2021  
K. Attention: GSRA Sharma  
**DATE OF RECEIPT** : 16/07/2021  
**DATE OF INITIATION** : 16/07/2021  
**DATE OF COMPLETION** : 12/08/2021  
**SAMPLE DESCRIPTION** : LAMINATE SAMPLE LABELED AS:-

Sr. No.	Description	Date Of production	Cycle No	Treatment Status
1.	Greenlam 1.0mm HPL, Décor No.#124 Suede Finish	August 20,2020	3174	Treated
2.	Greenlam 1.0mm HPL, Décor No.#124 Suede Finish	August 20,2020	3174	Untreated
3.	Greenlam 1.0mm HPL, Décor No.#269 Suede Finish	June 30,2020	3774	Treated
4.	Greenlam 1.0mm HPL, Décor No.#269 Suede Finish	June 30,2020	3774	Untreated
Untreated – Lab Control				

**Name of Test:**

Measurement of Antiviral activity on plastics and other non-porous surfaces and coating materials

**Name of Test Protocol:**

ISO 21702: 2019

**Scope of Method:**

This test specifies method for measuring antiviral activity on plastic and other non-porous surface of antiviral-treated products against specified virus. Due to individual sensitivities, the results of one test virus might not be applicable for other viruses.





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### Virus strains and host cells:

Test Virus: Influenza A virus (H3N2): A/Hong Kong/8/68: ATCC VR-1679

Host Cell: MDCK cell ATCC CCL-34

Infectivity titre test: TCID50 method

### Test Conditions:

Infectivity titre test: TCID50 method

### Experimental Conditions:

Test Sample	: Laminate surface (50 mm x 50 mm); Pre-sterilized by ETO
Control Carrier	: LDPE film (50 mm x 50 mm); Pre-sterilized by ETO
Test procedure	: Triplicates
Virus inoculum volume	: 0.4 ml
Viral titre	: $1.60 \times 10^6$ PFU/ cm <sup>2</sup>
Contact Period	: 24 hours
Neutralizer	: SCDLP broth, validated
Incubation for survivors	: 37° C CO <sub>2</sub> incubator/ 7 days

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- Samples are not drawn by the laboratory • Result relate only to the samples tested
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### Results:

**Test Virus:** Influenza A Virus (H3N2): A/Hong Kong/8/68: ATCC VR-1679

#### 1. Test Sample: Greenlam 1.0mm HPL, Décor No.#124 Suede Finish -Treated

Virus	Contact Duration	Group	Logarithm of Infectivity titre of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )	Average titre Infectivity of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )
Influenza virus suspension: ( 1.82 × 10 <sup>8</sup> PFU/ ml)	0 hours	Control (U <sub>0</sub> )	6.28	6.13
			6.10	
			6.00	
	24 hours	Control (U <sub>t</sub> )	6.20	6.11
			6.18	
			5.96	
	24 hours	Greenlam 1.0mm HPL, Décor No.#124 Suede Finish -Treated (A <sub>t</sub> )	3.22	3.31
			3.30	
			3.42	
Antiviral activity R= U <sub>t</sub> - A <sub>t</sub> (24 hours contact)			-	<b>2.80</b> (99.84%)

#### 2. Test Sample: Greenlam 1.0mm HPL, Décor No.#124 Suede Finish - Untreated

Virus	Contact Duration	Group	Logarithm of Infectivity titre of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )	Average titre Infectivity of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )
Influenza virus suspension: ( 1.82 × 10 <sup>8</sup> PFU/ ml)	0 hours	Control (U <sub>0</sub> )	6.28	6.13
			6.10	
			6.00	
	24 hours	Control (U <sub>t</sub> )	6.20	6.11
			6.18	
			5.96	
	24 hours	Greenlam 1.0mm HPL, Décor No.#124 Suede Finish - Untreated (A <sub>t</sub> )	5.62	5.72
			5.85	
			5.70	
Antiviral activity R= U <sub>t</sub> - A <sub>t</sub> (24 hours contact)			-	<b>0.39</b> (59.25%)





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### 4. Test Sample: Greenlam 1.0mm HPL, Décor No.#269 Suede Finish - Untreated

Virus	Contact Duration	Group	Logarithm of Infectivity titre of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )	Average titre Infectivity of virus (lgTCID <sub>50</sub> / cm <sup>2</sup> )
Influenza virus suspension: ( 1.82 × 10 <sup>8</sup> PFU/ ml)	0 hours	Control (U <sub>0</sub> )	6.28	6.13
			6.10	
			6.00	
	24 hours	Control (U <sub>i</sub> )	6.20	6.11
			6.18	
			5.96	
	24 hours	Greenlam 1.0mm HPL, Décor No.#269 Suede Finish - Untreated (A <sub>i</sub> )	5.70	5.75
			5.70	
			5.85	
Antiviral activity R= U <sub>t</sub> - A <sub>t</sub> (24 hours contact)			-	0.36 (56.36%)

#### Where

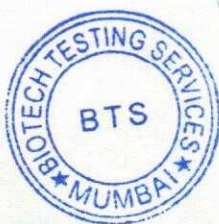
R is the Antiviral activity

U<sub>0</sub> is the average of common logarithm from three control/ untreated specimen immediately after inoculation

U<sub>t</sub> is the average of common logarithm from three control/ untreated specimen after 24 hours

A<sub>t</sub> is the average of common logarithm from three Treated specimen after 24 hours

For BIOTECH TESTING SERVICES



Dr Shilpa U. Nair  
Quality Manager  
(Authorized Signatory)

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