

TEST REPORT

LAB NO. : 2102401/ 1 - 2

DATE: 13/09/2021

NAME OF CUSTOMER : M/S. KUMARAPPA NATIONAL HANDMADE PAPER INSTITUTE
ADDRESS : Ramsinghpura, Sikarpura Road
Sanganer, Jaipur-302017
REFERENCE : Your Letter Ref: KNHPI/ Paint/ 20 21- 22/ 220 dated July 22, 2021
Kind Attention: Dr Saakshy
DATE OF RECEIPT : 27/07/2021
DATE OF INITIATION : 28/07/2021
DATE OF COMPLETION : 13/09/2021
SAMPLE DESCRIPTION : Paint specimen labeled as -

Sr. No.	Sample Code
1.	Prakritik Paint Eco-Friendly cow dung Paint Distemper
2.	Prakritik Paint Eco-Friendly cow dung Paint Emulsion
Untreated lab control	

Name of Test:

Standard Test Method for Determining the Resistance of Paint Films and Related Coatings to Fungal Defacement by Accelerated four week Agar Plate Assay

Test Method:

ASTM D 5590: 2017

Procedure:

Paint is applied by brush coating to 4.2-cm filter paper. Care is taken to apply a thin, even coating, with the same thickness for all coating. After application, it is kept suspend to air dry for 24 to 72 h at room temperature. The samples are cut into 38 mm discs/ squares. These are placed on the center of pre-poured agar plates. A thin coat of fungal suspension is applied to each specimen using a sterile atomizer making sure the surface is covered, but not to over saturate.

A set of positive and negative growth control is included. A set of Whatman #2 (or equivalent) filter papers or the drawdown papers without coating may be suitable growth control/ viability control. Incubate all plates at 28°C under 85 to 90 % relative humidity for 4 weeks.

Experimental conditions:

Size of sample : 38 mm disc
 Test fungus : Mixed spore suspension of *Aspergillus niger* ATCC 9642, *Penicillium funiculosum* ATCC 11797 and *Aurobasidium pullulans* ATCC 15233
 Incubation : 28°C ± 90 % humidity

Results:**Visual/ Microscopic Assessment Report**

Sample Description	Zone of Inhibition	Rating in Terms of Growth
Prakritik Paint Eco-Friendly cow dung Paint Distemper	No zone	0
Prakritik Paint Eco-Friendly cow dung Paint Emulsion	3.3 mm	0
Whatman Filter paper - Viability control	-	4

Observation for Visible Effects:

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

INTERPRETATION:

Sample labeled as **Prakritik Paint Eco-Friendly cow dung Paint Distemper** and **Prakritik Paint Eco-Friendly cow dung Paint Emulsion** are **Resistant to Fungus attack** at the end of 28 days of incubation when tested as per **ASTM: 5590: 2017** test methods.

For BIOTECH TESTING SERVICES

Dr Shilpa U. Nair
Quality Manager
(Authorized Signatory)