



## BIOTECH TESTING SERVICES TEST REPORT

LAB NO. : 2102733/ 1

DATE: 16/09/2021

**NAME OF CUSTOMER** : M/S GYPTECH SYSTEMS PVT. LTD  
**ADDRESS** : C-17, Miraj Apartment,  
Nr. Nattu Bhai Circle,  
Race Course (West)  
Vadodara 390007  
**REFERENCE** : Letter Ref. No.: Nil dated August 18, 2021  
K. Attention: Ashish Mathur  
**DATE OF RECEIPT** : 18/08/2021  
**DATE OF INITIATION** : 18/08/2021  
**DATE OF COMPLETION** : 16/09/2021  
**SAMPLE DESCRIPTION** : Test sample labeled as -

| Sr. No. | Description                | Treatment  |
|---------|----------------------------|------------|
| 1.      | Gypotech Pax- Akostika (C) | Non Coated |

### 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°C ± 1°C  
Humidity : > 85% Relative Humidity  
Duration of Exposure : 28 days

## 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:

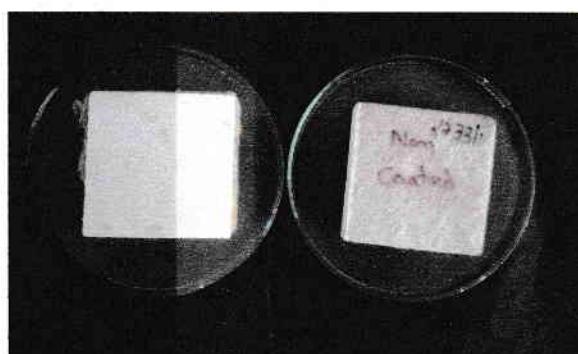
Observations were made on weekly basis for appearance for the density of fungal growth. The filter paper control pieces had copious fungal growth at 2 weeks.

At 4<sup>th</sup> 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 |
| Gyptech Pax- Akostika (C)<br>Non Coated<br>(upper) | Set I                | 0      | 0      | 0      | 0-1    |
|                                                    | Set II               | 0      | 0      | 0      | 0-1    |
|                                                    | Set III              | 0      | 0      | 0      | 0-1    |
| Gyptech Pax- Akostika (C)<br>Non Coated<br>(lower) | Set I                | 0      | 0      | 0      | 0      |
|                                                    | Set II               | 0      | 0      | 0      | 0      |
|                                                    | Set III              | 0      | 0      | 0      | 0      |
| Control                                            | -                    | 1      | 3      | 4      | 4      |



Upper & lower at 4 weeks



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### INTERPRETATION:

Test sample labeled as **Gyptech Pax- Akostika (C)** - Non Coated (upper & lower) is **Resistant to fungal attack** at the end of 28 days of incubation when tested as per specified method.

For BIOTECH TESTING SERVICES



Dr Shilpa U. Nair  
Quality Manager  
(Authorized Signatory)

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