



## BIOTECH TESTING SERVICES

### TEST REPORT

LAB NO. : 2002894/ 2

DATE: 08/09/2020

**NAME OF CUSTOMER** : M/S. MERINO GROUP.  
**ADDRESS** : 70, KLJ Complex, 2nd Floor,  
Moti Nagar, New Delhi - 110015. INDIA  
**REFERENCE** : Your Letter Ref. Nil dated August 14, 2020  
Kind Attention: Deepu Thomas Joseph  
**DATE OF RECEIPT** : 14/08/2020  
**DATE OF INITIATION** : 14/08/2020  
**DATE OF COMPLETION** : 08/09/2020  
**SAMPLE DESCRIPTION** : Sample labeled as -

| Sr. No.               | Sample Code   |
|-----------------------|---|
| 2.                    | Matt Meister – Design No – 25391 -18 mm Thickness - Color Solar White |
| 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°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:**

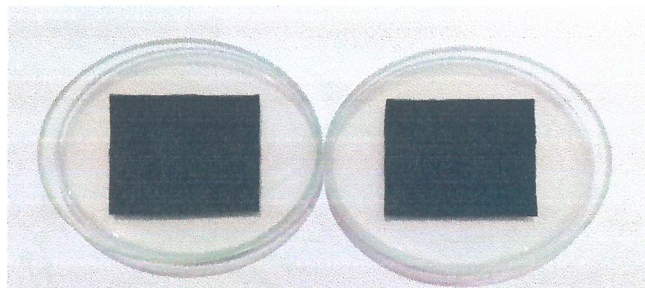
Observations were made on weekly basis for appearance for the density of fungal growth. The filter paper control pieces had copious fungal growth at 2 weeks.

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 |
| Matt Meister – Design No – 25391 -18 mm Thickness - Color Solar White (Upper) | Set I                | 0      | 0      | 0      | 0      |
|   | Set II               | 0      | 0      | 0      | 0      |
|   | Set III              | 0      | 0      | 0      | 0      |
| Matt Meister – Design No – 25391 -18 mm Thickness - Color Solar White (Lower) | Set I                | 0-1    | 1      | 1-2    | 3      |
|   | Set II               | 0      | 0      | 0      | 0      |
|   | Set III              | 0      | 0      | 0      | 0      |
| Control   | -                    | 1      | 3      | 4      | 4      |



**Upper and Lower; at 4 weeks**

• Samples are not drawn by the laboratory • Result relate only to the samples tested  
 • This report shall not be reproduced except in full without prior permission of this laboratory

**INTERPRETATION:**

Test sample labeled as **Matt Meister – Design No – 25391 -18 mm Thickness - Color Solar White** 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)