PRODUCT DATA SHEET

Avery Dennison[®] Organoid Natural Surfaces

Issued: 11/2022

Introduction

Natural Surfaces from Organoid® are made of natural raw materials. The face films consist of hand-cut Moss Bright Green, Moss Dark Green, Birch Leaves Cut, Cornflower Mix, Mountain Hay + Marguerites or Original Alpain Hay and they are handcrafted in a carbon responsible way. Thus, they retain most of their natural properties, and allow a multi-sensorial experience such as their fragrance, feel, and look. They are specially designed for new interior decoration providing a natural and elegant touch to the area.

Conversion

Organoid Natural Surfaces offer good manual and digital cutting performance. While kiss-cutting was found challenging, both cutting-through and laser cutting of Organoid Natural Surfaces provided outstanding results using Zund digital cutting systems and EuroLaser equipment respectively. Cutting-through is as well possible with most plotting systems available in

the market using a heavy duty knife. For more information on cutting, application, maintenance and removal please refer to TB. 3.22. Application of Organoid Natural Surfaces.

To ensure application suitability, the substrate/ adhesive compatibility and satisfactory product performance always do a pilot test of the proposed construction under actual application conditions before going into full scale production. Due to potential colour variation from batch to batch, it is recommended to use Organoid films originating from the same batch in a single project.

Due to the sensitivity of Organoid Moss to humidity and temperature, a visible gap could appear under certain climate conditions. The application with an overlap **can avoid the visibility** (see TB. 3.22. Application of Organoid Natural Surfaces).

Recommendations

Indoor architectural applications. The high tack adhesive ensures excellent adhesion on a wide variety of difficult substrates such as smooth and slightly textured walls, plasterboard, chipboard, metal, concrete, furniture surfaces among others.

Features

- » Highly decorative and minimalistic natural surface for new interior decoration designs
- » Excellent preservation of the natural characteristics of surface
- » Eco-friendly product due to the organic origin of the Organoid Natural Surface
- » Robust durability up to five years
- » Excellent adhesion to a wide variety of substrates
- » Easy to cut and apply.
- » Interior application only without direct UV exposure and for vertical usage





Face Film Organoid Natural Surfaces: Moss Bright Green,



Adhesive

Permanent acrylic adhesive PET reinforced for mechanical and dimensional stability

Cornflower Mix, Mountain Hay + Marguerites or

Moss Dark Green, Birch Leaves Cut,



Backing Yellow Glassine

Durability

5 years indoor



Shelf Life 18 months



Physical	Characteristics
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Physical Characteristics		
	Test method ¹	Results
Product		
Moss Bright Green and Moss Dark Green		
Surface coverage (%)		70
Caliper, facefilm + adhesive (micron)	ISO 534	800
Dimensional stability (mm max.)	FINAT FTM 14	3.5
Adhesion, initial (N/25mm)	FINAT FTM-1, stainless steel	33.4
Adhesion, after 24 hours (N/25mm)	FINAT FTM-1, stainless steel	36.9
Product		
Original Alpine Hay and Mountain Hay + Marguerites		
Surface coverage (%)		60
Caliper, facefilm + adhesive (micron)	ISO 534	1000
Dimensional stability (mm max.)	FINAT FTM 14	0.2
Adhesion, initial (N/25mm)	FINAT FTM-1, stainless steel	16.7
Adhesion, after 24 hours (N/25mm)	FINAT FTM-1, stainless steel	17.9
Product		
Birch Leaves		
Surface coverage (%)		75
Caliper, facefilm + adhesive (micron)	ISO 534	1000
Dimensional stability (mm max.)	FINAT FTM 14	0.2
Adhesion, initial (N/25mm)	FINAT FTM-1, stainless steel	20
Adhesion, after 24 hours (N/25mm)	FINAT FTM-1, stainless steel	25
Product		
Cornflower Mix		
Surface coverage (%)		85
Caliper, facefilm + adhesive (micron)	ISO 534	1000
Dimensional stability (mm max.)	FINAT FTM 14	0.2
Adhesion, initial (N/25mm)	FINAT FTM-1, stainless steel	26
Adhesion, after 24 hours (N/25mm)	FINAT FTM-1, stainless steel	30
Other Product Properties		
Shelf life (years)	Stored at 22° C/50-65 % RH	1.5
Durability ² (years)	No direct sunlight exposure, 50-65% RH	5
Chemical resistance	Low chemical resistance to mild acids a alkalines	and
Temperature range		
Application temperature (Minimum: °C)		10
Service temperature (°C to +°C)		10-40
Certificates and Test Method		
Fire. EN13501*	D-s1, d0	



VOC Emissions. AgBB 2018 Odour testing. VDA recommendation 270:2018-06 Allergen: PhI p5 Resistance to fungus and wicking. DIN EN 16492 2014 Cornflower Mix D-s1, d2 Pass** Clearly perceptible but not bothering*** Bellow quantification limit (<0.08 µg/g) Original Alpine Hay: High Moss Bright Green: High Moss Dark Green: High Mountain Hay + Marguerites: Low to moderate:

*The test has been performed using gypsum plasterboard.

**Tested on Moss Dark Green

*** Tested on Mountain Hay + Marguerites and Original Alpine Hay

Special Notes

Similar to other materials made of natural fibers, our natural surfaces also breathe, i.e.they swell and shrink with the change in humidity in the room. This biochemical process can cause individual parts to detach from the surface. This is not a loss of quality, but a sign of the authenticity of the surface.

Organoid Natural Surfaces consist of natural plant fibers, which is why individual products of the same type may differ slightly in color, scent or fiber properties. Deviations (such as but not limited to are: slightly different colors, lengths and diameters of fibers as well as coverage) of these biological characteristics therefore do not constitute defects and do not provide a basis for warranty claims. We do our best to keep the variation in natural characteristics as low as possible by carefully checking each of our raw materials, labelling them with a batch number and trying to use natural materials from the same batch for larger deliveries.

In the case of natural surfaces with moss, temporary changes to the surface may occur under certain climatic conditions. Due to physical processes, small salt crystals can be formed on the surface at a relative humidity below 40%. These crystals are of natural origin and are not hazardous to health. Moreover, they can simply be removed carefully with a lint-free dry cloth. Even in its compressed state, the natural moss largely retains its property of storing room humidity and slowly releasing it back into its environment. This has a positive effect on the indoor climate. The haptics and the dimensions of the moss can be different due to changing room humidity: with increased room humidity, the surface appears softer, with low room humidity it becomes harder and more brittle. This is the natural behavior of moss. Because the moss is an upcycling product it is possible that there are moss particles with different colors in the surface.

Organoid Natural Surfaces are made of 100% natural raw materials and are subject to the natural aging process especially through UV light. Due to the manufacturing process of the natural raw materials slightly colored pressing joints may appear with an interval of 3 m. The event of tunneling on the liner paper can be caused by humidity exchange between the liner and room humidity, thus the control of the relative humidity is very important. For further information about what is considered a defect, please refer to TB 3.22 Preparation and Application of Avery Dennison Organoid Natural Surfaces.

Important

Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of this document, the English version shall be prevailing and leading.

1) Test methods: More information about our test methods can be found on our website.

2) Durability: The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.



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