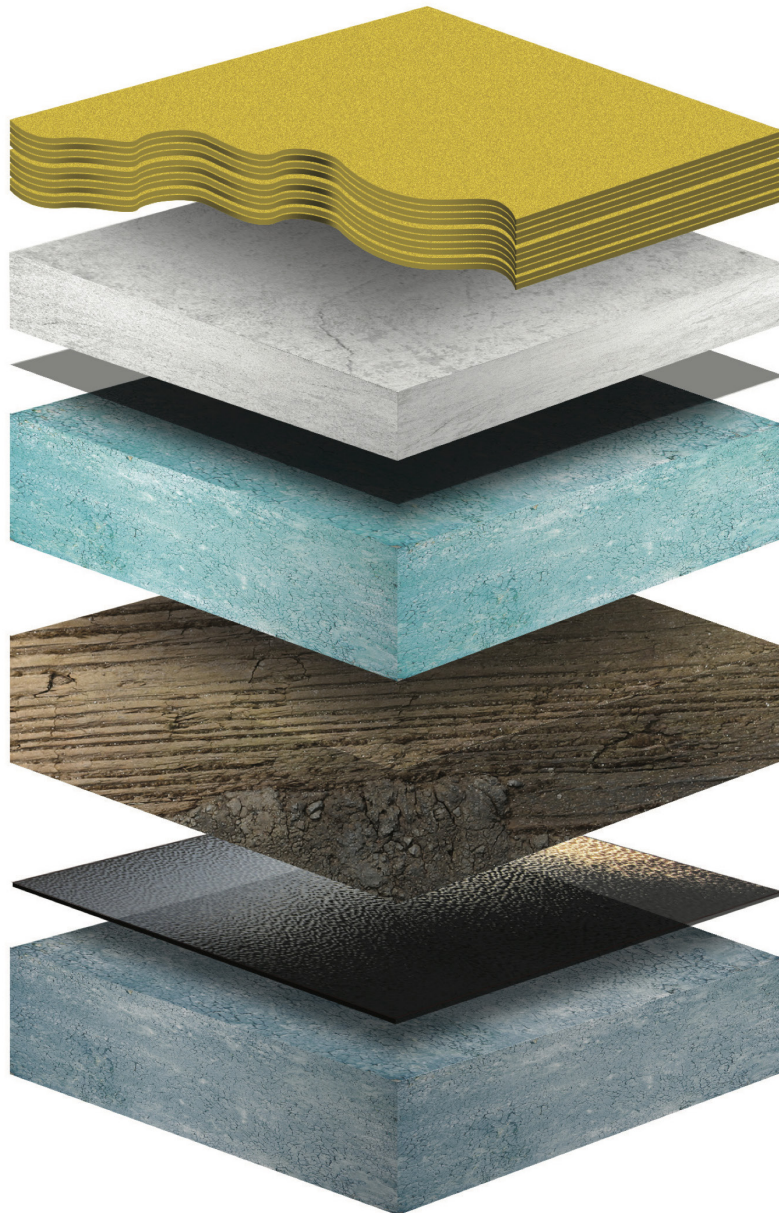


BETTER CHOICES, HEALTHIER SPACES



HANDBOOK

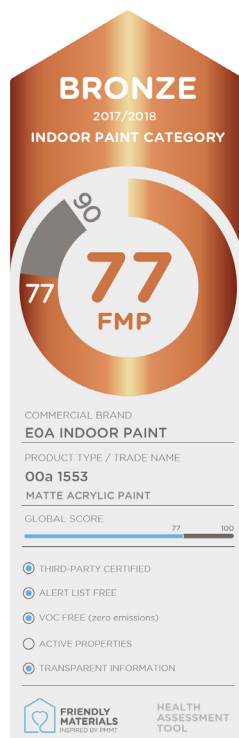
FOR MANUFACTURERS



**FRIENDLY
MATERIALS**
INSPIRED BY PMMT

01

Assessment guide for Friendly Materials[©] products



BETTER
CHOICES,
HEALTHIER
SPACES



Introduction

Friendly Materials® is an analytical assessment methodology that allows evaluating and objectively compare how do building materials and building systems affect indoor areas and, therefore, the health of its occupants

Aims of the assessment

The aim of the Friendly Materials® assessment is to acknowledge the health score for your indoor building products.

The analytical assessment is based on objective influence factors, detailed in page 6, that are balanced according to the algorithm developed by Friendly Materials®. Such assessment enables the manufacturer to:

- Objectively acknowledge the Friendly Materials® health score for the designated products.
- Have your products listed at the healthy material's database www.friendlymaterials.com that reaches all Europe.
- To obtain improvement recommendations that allow those products to achieve higher scores, based on how they affect human health, on transparency criteria and on certified information.
- To have a marketing tool that allows the company to gain a foothold on its market, standing as an undisputed leader at an international level.
- All the assessed products, regardless of its score, will get a recognition medal that may be used by the manufacturer to promote its products in catalogues, online or any other advertising means.
- Maximize its values as a company with great corporate social responsibility, contributing to a healthier and more transparent future.

Work methodology

To accomplish the evaluation, we set the following task order:

1. Collecting information

For each assessed product we need to gather detailed information about its chemical composition, if there are any third-party certifications and other technical data, specified hereafter:

- commercial catalogue
- technical data sheet
- safety data sheet
- declaration of content (if available)
- labels, diplomas or other third-party certificates for each product, such as: quality certificates, eco labels, EDPs, etc.
- lab report on VOC emissions (if available)
- lab report on bacterial activity (if available)

2. Friendly Materials® product assessment

Once our team receives the request documents, the product assessment process starts immediately.

Before concluding the evaluation process, we will send you a preliminary report with a score assigned for each product, so you can check if everything is OK or if you want to add any missing or new information.

3. Infocard, diploma and medal

Each product will obtain a Product Infocard with data concerning the evaluation criteria and the score awarded. Additionally, we will generate a bronze, silver or gold medal for each product with its Friendly Materials® Points and category detailed.

Lastly, we will deliver a diploma that certifies the Friendly Materials® assessment of each one of the evaluated products.

Confidentiality

01. Friendly Materials® Inspired by PMMT considers that all the information given by the assessed company is confidential, except written statement from **the Manufacturer**.

02. Friendly Materials® Inspired by PMMT is committed not to share the commercial brand's name and the correspondent assessed building products, without prior authorization by the company, except for the purpose of the Friendly Materials project and its dissemination. In particular, at www.friendlymaterials.com

03. Friendly Materials® Inspired by PMMT is committed not to share the product's ingredient list with the public. All the information regarding the chemical composition will remain private between PMMT and **the Manufacturer**. A non-disclosure agreement shall be sign by both parts.

04. Friendly Materials® Inspired by PMMT obtains no rights about the given information, except for the purpose of the present assessment.

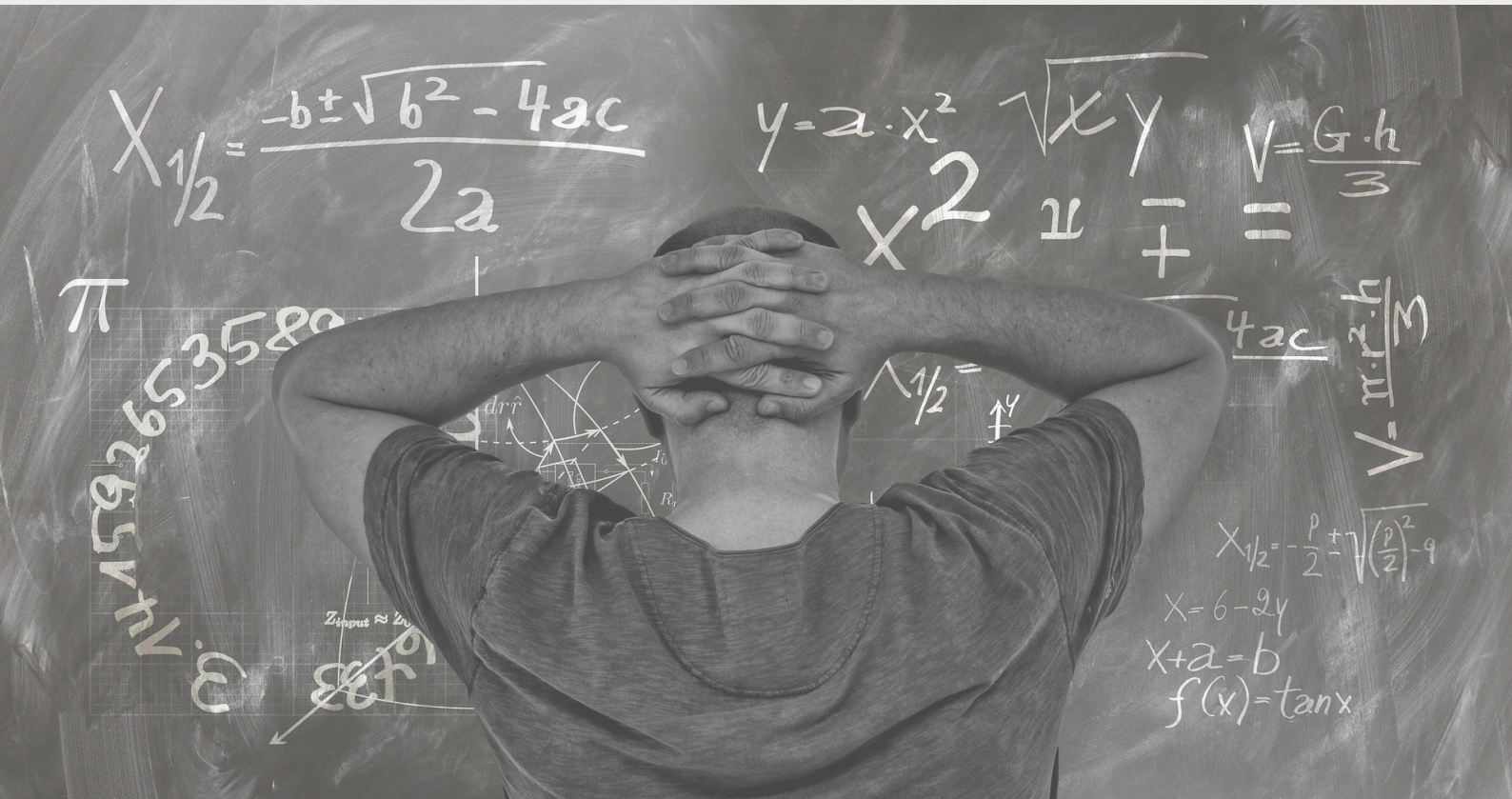
05. Friendly Materials® Inspired by PMMT will not be accountable, during the lifespan of the disclosure, by any errors or omissions made by **the Manufacturer**.

06. Friendly Materials® Inspired by PMMT will not be responsible by any loss of any type, including exemplary or punitive damages, loss of profits, revenue or contracts.

07. In accordance with chapter 5 of the LOPD (Data Protection Legislation) personal data may not be published or made accessible to the public.

02

Understanding
product infocards
&
product medals



Product infocard

Understand the evaluation criteria:
all the points marked in blue.

01. FM® Alert List

02. Short description

03. Chemical composition

04. Labels and certificates

05. VOCs

06. Antibacterial activity

07. Toxicity in case of fire

08. Chemical and physical resistance

09. Transparent information

10. Score

FRIENDLY MATERIALS
PRODUCT ALGORITHM INFOCARD

CONTIENE SUSTANCIAS DE LA FM ALERT LIST, O ALGUNA SVHC DEL REACH?
NO
SI, PERO NO HAY ALTERNATIVA
SI

INFORMACIÓN GENERAL:
Lorem ipsum ad his scripta blandit partiendo, eum fastidii accusan euripidis, eum liber hendrerit an. Lorem ipsum ad his scripta blandit partiendo, eum fastidii accusan euripidis in, eum liber hendrerit an.

COMPOSICIÓN QUÍMICA Y NÚMEROS CAS:
Ingrediente 1 #222-33-45 100% a 50,1%
Ingrediente 2 #222-33-46
Ingrediente 3 #222-33-47 50% a 25,1%
Ingrediente 4 #222-33-47 25% a 5,1%
5% a 1,1%
1% a 0%

MATERIAL:
TIPO DE MATERIAL

MARCA:
MARCA COMERCIAL REFERENCIA

GRUPO:
NOMBRE DEL GRUPO

CATEGORIA:
CATEGORIA DEL MATERIAL

EMISIONES DE VOCs? (TVOCs > 28 días)
60 ug/m3 1000 ug/m3 2000 ug/m3 (OMS-WHO 2015)

EMISIONES DE FORMALDEHIDO? (> 30 días)
10 ug/m3 (UE - LCI 2016) 100 ug/m3

EMISIONES DE ACETALDEHIDO? (> 28 días)
20 ug/m3 400 ug/m3 (UE - LCI 2016) 1200 ug/m3

EMISIONES DE COMPUESTOS CANCERÍGENOS CIA o CIB? (> 28 días)
0 ug/m3 1 ug/m3 2 ug/m3

ACCIÓN FRENTE A BACTERIAS
S/EFEECTO a S/EFEECTO b S/EFEECTO c BACTERIOESTÁTICO BACTERICIDA

TOXICIDAD EN CASO DE INCENDIO
TÓXICO VENTUALMENTE TÓXICO NO ES TÓXICO

RESISTENCIA A AGENTES QUÍMICOS Y FÍSICOS
BAJA BUENA A UNO DE ELLOS BUENA A AMBOS

ETIQUETAS Y CERTIFICADOS:
Ecolabel, floor score, EPD, Declare, etc.



Product infocard

Evaluation criteria

01.

Friendly Materials® Alert List

Does the product have any substances from the FM® Alert List or any substance identified as SVHC by the REACH program?

The following responses are admitted:

- Yes, it does contain a substance identified on the FM® Alert List or in the Annex XVII to REACH (the substance or substances shall be identified).
- No, it does not contain any substance identified on both lists.
- Yes, but there is no available alternative. The product contains an identified substance, but until the present day there is no suitable alternative to the use of such chemical.

02.

Short description

Short description of the assessed product, according to the description published on the sales catalogue or at the company website.

03.

Chemical composition

Product's chemical composition, including all the intentionally added ingredients and known residual substances up to 100ppm. Each ingredient shall be identified by its common name and CAS registry number. As for the % of each ingredient we do not request an exhaustive description. We must only be able to fit the ingredients into the following ranges: [\leq 1%] [1,1 to 5%] [5,1 to 25%] [25,1 to 50%] [50,1 to 100%]

04.

Labels and certificates

The following labels and certificates are accepted:

- ISO 16000. Quality certificates and regulations.

International document on indoor air quality in which are considered several aspects: VOC emissions, formaldehyde emissions, carbonilic and carcinogenic compounds.

- ISO 14024. Eco-labels Type I

Such labels establish requirements for several product categories (paints, insulation, furniture...). They ensure the user that, from an environmental point of view, a product is preferable than another from the same category. Certifications issued by third-parties.

- ISO 14025. Environmental product declarations Type III

Quantitative information on the several environmental impacts that the product may generate along its life cycle. Certifications issued by third-parties.

05.

VOCs - Emissions of volatile organic compounds

The volatile organic compounds, also known as VOCs are a group of chemical substances that easily transform into gases or fumes.

We will consider the total emissions of organic volatile compounds (TVOCs) and also the emissions of some specific VOCs that are frequently found in indoor environments:

- Emissions of TCOVs, after 28 days ($\mu\text{g}/\text{m}^3$)
- Emissions of formaldehyde, after 30 days ($\mu\text{g}/\text{m}^3$)
- Emissions of acetaldehyde, after 28 days ($\mu\text{g}/\text{m}^3$)
- Emissions of compounds classified as C1A or C1B, after 28 days ($\mu\text{g}/\text{m}^3$)

For paints, replace the last three lines for:

- VOC content (g/l)
- Emissions of formaldehyde, after 30 days ($\mu\text{g}/\text{m}^3$)
- Free formaldehyde content, after 24h of the first application (g/l or ppm)

06.

Antibacterial activity and lab certification

Does the product have any kind of antibacterial activity? If so, you shall specify which type of action (when preventing the growth of bacteria and mold it is classified as bacteriostatic, and when eliminating the bacterias it is classified as bactericide) and present the supporting documents.

In case of negative answer, you may add any information that you find relevant (f.e very easy to clean with neutral products, prevents the growth of mold and bacteria, etc).

07.

Toxicity in case of fire

The decomposition products that may occur in case of fire shall be described (f.e may release carbon dioxide and carbon monoxide).

08.

Chemical and physical resistance

How does the material react in case of physical or chemical aggressions?

09.

Transparent information

Whenever the assessed company provides all the information needed to fill in all the infocard fields, a "transparent information" stamp will be given and the correspondent points will be added.

10.

Score

Score obtained by the assessed product and maximum points on its category.



Friendly Product Medals

How to read the medals

BRONZE
2017/2018
INDOOR PAINT CATEGORY

90
77
77
FMP

COMMERCIAL BRAND
EOA INDOOR PAINT

PRODUCT TYPE / TRADE NAME
OOa 1553
MATTE ACRYLIC PAINT

GLOBAL SCORE
77 100

- THIRD-PARTY CERTIFIED
- ALERT LIST FREE
- VOC FREE (zero emissions)
- ACTIVE PROPERTIES
- TRANSPARENT INFORMATION

FRIENDLY MATERIALS
INSPIRED BY PMMT

HEALTH ASSESSMENT TOOL

01. Assigned medal
02. Year
03. Category
04. Maximum achievable score (changes according to each category)
05. Achieved score
06. Trade name / Commercial brand
07. Product identification
08. Global score
09. Third-party certified
10. FM® Alert List free
11. VOC free (zero emissions)
12. Active properties
13. Transparent information

Friendly Product Medals

How to read the medal

- 01.
Achieved medal

Three different medals may be obtained: gold, silver or bronze. In case the assessed product does not achieve a score high enough to receive a medal it will be given the word "rated".
- 02.
Year

All the medals are valid for a one year period.
- 03.
Category

Each product will be included in its corresponding category, enabling comparison with its peers. There are 9 main categories that subdivide into more specific categories. All the categories and sub-categories may be consulted at www.friendlymaterials.com
- 04.
Maximum achievable score

The maximum achievable score changes according to each category. The maximum scores defined for each category are what allows to compare products to their peers. Although the maximum global score is 100, each category has its own achievable maximum.
- 05.
Achieved score

The achieved score is expressed in FMP - Friendly Material Points
- 06. y 07.
Trade name and product identification
- 08.
Global score

Achieved score over 100.
- 09.
Third-party certified

Whenever the product has labels or certificates issued by third-parties, the blue dot will be on
- 10.
FM[®] Alert List

Whenever the product does not contain any substance from the Friendly Materials[®] Alert List, the blue dot will be on.
- 11.
VOC free (zero emissions)

Whenever the assessed product is free of VOC emissions (zero emissions - 0 ug/m³) the blue dot will be on.
- 12.
Active properties

If the product has any kind of active property, such as photocatalysis, anti-pollutant materials, antibacterial surfaces (etc), the blue dot will be on.
- 13.
Transparent information

Whenever the assessed company provides all information needed to fill in all the infocard fields, the blue dot will be on. (corresponding to the "transparent information" stamp on the infocard)



WANT TO KNOW MORE?

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