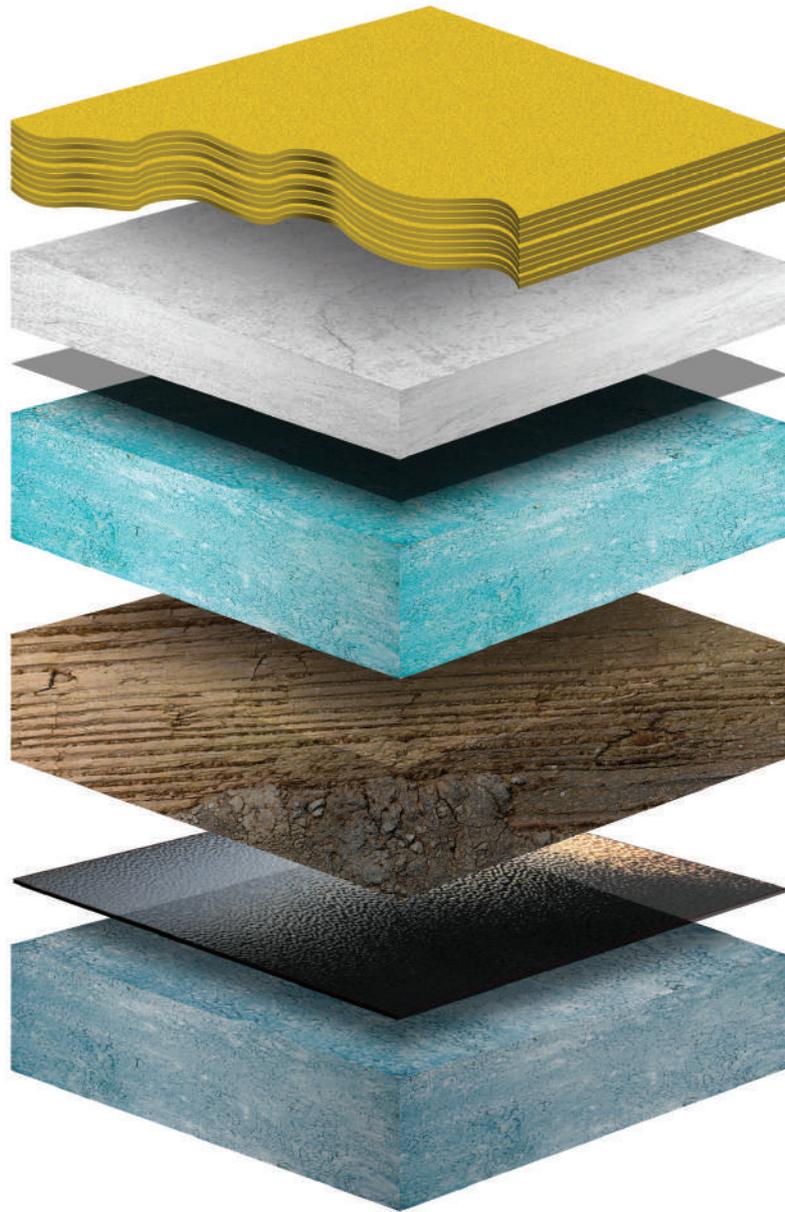


BETTER CHOICES, HEALTHIER SPACES



HANDBOOK FOR MANUFACTURERS



**FRIENDLY
MATERIALS®**
INSPIRED BY PMMT



**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 materials' 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.

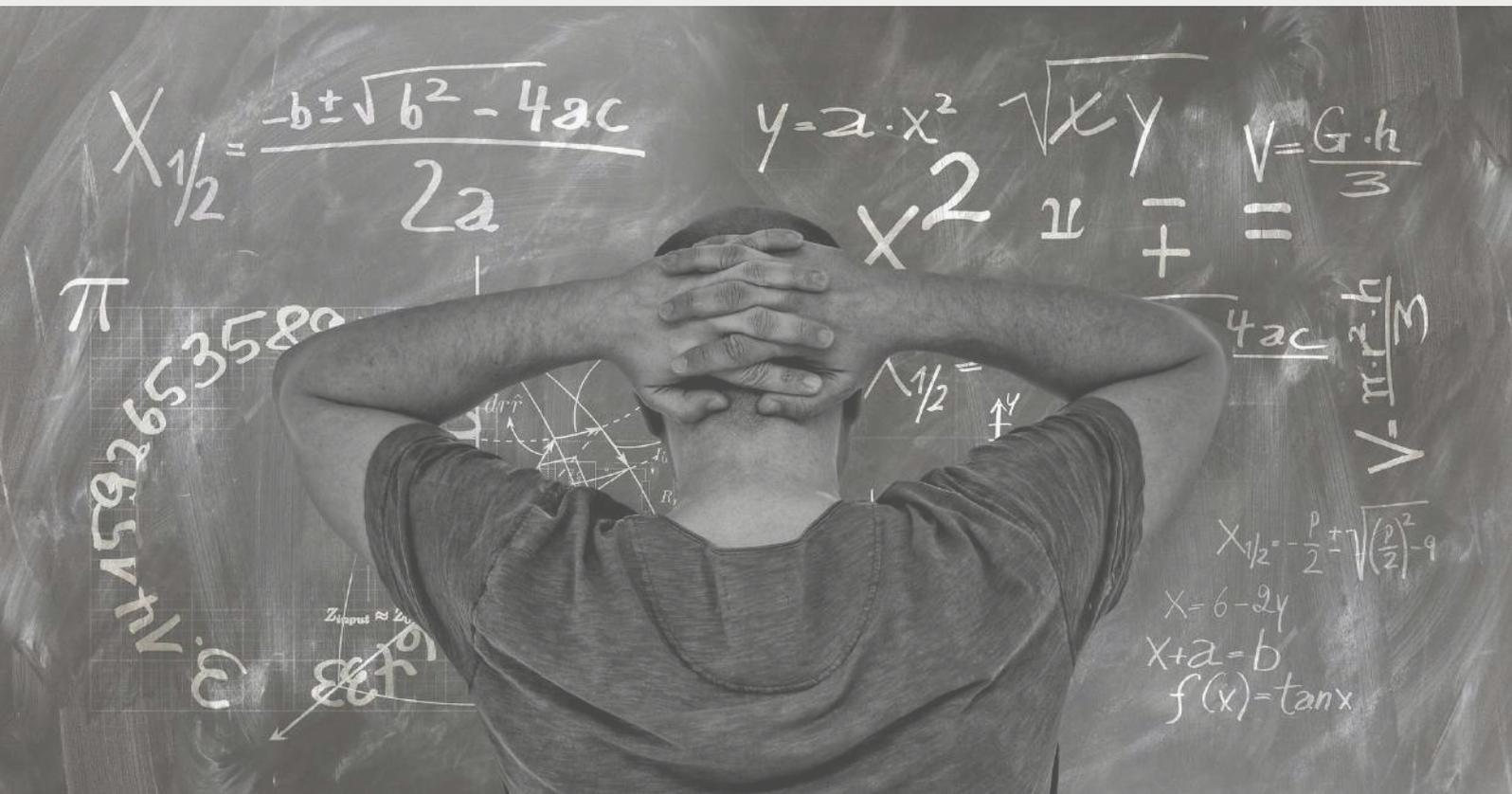
05. Friendly Materials® Inspired by PMMT will not be accountable, during the lifespan of the disclosure, by any errors or omissions made by **the Manufacturer**.

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 Potection 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
- 05. VOCs
- 09. Transparent information
- 10. Score

The image shows a screenshot of the 'FRIENDLY MATERIALS PRODUCT ALGORITHM INFOCARD' (VERSION 1.0) for a 'SILVER' product. The card is divided into several sections, with blue lines and circles highlighting specific evaluation criteria:

- 01. FM® Alert List:** Located in the top-left section, it asks 'DOES IT CONTAIN ANY SUBSTANCE FROM THE FM ALERT LIST OR IDENTIFIED AS SVHC BY REACH?' and shows a 'NO' result with a green checkmark.
- 02. Short description:** Located in the top-middle section, it includes 'PRODUCT TYPE: ASSESSED PRODUCT' and 'MANUFACTURER AND PRODUCT NAME: BRAND / PRODUCT NAME'.
- 03. Chemical composition:** Located in the middle-left section, it lists 'CHEMICAL COMPOSITION AND CAS NUMBER' with three ingredients: Ingredient 01 (90%+), Ingredient 02 (10%+), and Ingredient 03 (20%+).
- 04. Labels and certificates:** Located in the middle-bottom section, it displays a grid of various certification logos including BCI, floor score, green building, and Declare.
- 05. VOCs:** Located in the top-right section, it shows 'VOC EMISSIONS? (TVOCs > 28 days)' with a bar chart indicating a value of <math>< 91 \mu\text{g}/\text{m}^3</math>.
- 06. Antibacterial activity:** Located in the bottom-right section, it shows 'ANTIBACTERIAL ACTIVITY' with a bar chart indicating 'NO EFFECT: does not favor the development of bacteria'.
- 07. Toxicity in case of fire:** Located in the bottom-right section, it shows 'TOXICITY IN CASE OF FIRE' with a bar chart indicating 'POSSIBLE TOXIC'.
- 08. Chemical and physical resistance:** Located in the bottom-right section, it shows 'RESISTANCE TO CHEMICAL AND PHYSICAL AGENTS' with a bar chart indicating 'GOOD RESISTANCE TO BOTH AGENTS'.
- 09. Transparent information:** Located in the top-right section, it includes a 'TRANSPARENT INFORMATION' icon and a 'CATEGORY' icon.
- 10. Score:** Located in the top-right section, it shows a score of '76 / 83 pts'.

- 03. Chemical composition
- 04. Labels and certificates
- 06. Antibacterial activity
- 07. Toxicity in case of fire
- 08. Chemical and physical resistance

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 bacteria it is classified as bactericide) and present the supporting documents.

In case of negative answer, you may add any information that you find relevant (e.g. 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 (e.g. 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 corresponding 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

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 can 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 on 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)

03

Sample Report

Evaluation Report

Manufacturer name here

Your product name here



YOUR LOGO HERE

picture of your product



List of the provided documents

Sample list of provided documents

- **Commercial catalogue**
file 01.pdf
- **Greenguard certificate**
file 02.pdf
- **Bureau veritas ISO 14021:2006**
file 03.pdf
- **Emissions dans l'aire interieur A+**
file 04.pdf
- **Technical data sheet**
file 05.pdf
- **Safety data sheet**
file 06.pdf
- **Environmental product declaration**
file 07.pdf

Specific information **sample report**

All the detailed information is based on the received documents.

General description:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Does it have any substances from the FM Alert List or any SVHC for REACH?

- no.

Product composition:

- ingredient name here CAS #1234-56-7 [50% to 100%]
- ingredient name here CAS #1233-45-6 [5% to 25%]
- ingredient name here CAS #1223-44-5 [5% to 25%]
- ingredient name here CAS #1123-34-5 [1% to 5%]
- undisclosed ingredient >1%

Certificates and eco-labels:

- Emissions dans l'aire interieur A+, EPD, Greenguard Certified

Emissions of VOCs:

- TVOCs = ≤ 100 ug/m³
- Formaldehyde = ≤ 30 ug/m³
- Acetaldehyde = 0 ug/m³
- C1A or C1B = $\leq 0,5$ ug/m³

Antibacterial activity and lab certificate:

- Bacteriostatic. Prevents growth of bacterias and mold.
- no lab certificate

Toxicity in case of fire:

- Potentially toxic. In the event of a fire it may release carbon monoxide and carbon monoxide.

Any other feature:

- none



Infocard sample



FRIENDLY MATERIALS
PRODUCT ALGORITHM INFOCARD



INFORMACIÓN TRANSPARENTE



83
/100 RMP

GROUP: CERAMIC & STONE
CATEGORY: CERAMIC & STONEWARE

DOES IT CONTAIN ANY SUBSTANCE FROM THE PVI ALERT LIST OR IDENTIFIED AS SVHC BY REACH?

NO



MANUFACTURER AND PRODUCT NAME

**GRANITI FIANDRE
URBAN ACTIVE**

MATERIAL

**PHOTOCATALYTIC
CERAMIC PORCELAIN**

WHERE IT IS APPLIED?



VERTICAL COVERINGS
- use on interior walls
- on any support, provided that it is level and clean



FLOORING
- ideal for areas of intensive use
- suitable for both indoor and outdoor areas.

ADDITIONAL INFORMATION:

GENERAL INFORMATION

ACTIVE SURFACES products are high quality ceramics for floors and walls, both for indoor and outdoor areas. Maintains photocatalytic properties both under UV lights and solar as with led lights.

CHEMICAL COMPOSITION AND CAS NUMBER

Water	100% x 100%
Fer	20% x 25%
Feldspatos	20% x 25%
Mullin	20% x 25%
Quartz	1% x 1%
Koolin	1% x 1%
Titanium Dioxide	1% x 1%

VOC EMISSIONS? (TVOCs > 28 days)

60 µg/m³ (EPA 2013) (EPA 2013)

220 µg/m³ ACTIVE AIR PURIFIER

FORMALDEHYDE EMISSIONS? (> 30 days)

19 µg/m³ (EPA 2013)

ACETALDEHYDE EMISSIONS? (> 28 days)

29 µg/m³ (EPA 2013)

400 µg/m³ filtro de emisiones de acetaldelido

CARCINOGENIC COMPOUNDS EMISSIONS CIA or CIB? (> 28 days)

0 µg/m³ (EPA 2013)

1 µg/m³

ANTIBACTERIAL ACTIVITY

BACTERICIDAL PROPERTIES ACTIVE SURFACES

TOXICITY IN CASE OF FIRE

NON TOXIC IN CASE OF FIRE

RESISTANCE TO CHEMICAL AND PHYSICAL AGENTS

GOOD RESISTANCE TO BIRTH AGENTS

ANTIBACTERIAL ACTIVITY

BACTERICIDAL PROPERTIES ACTIVE SURFACES

TOXICITY IN CASE OF FIRE

NON TOXIC IN CASE OF FIRE

RESISTANCE TO CHEMICAL AND PHYSICAL AGENTS

GOOD RESISTANCE TO BIRTH AGENTS

LABELS & CERTIFICATES:



Declare.



FM® Product Medal

Sample medal

Product name

77/90 FMP

BRONZE

Third-party certified

Certificado por entidades externas

Alert List free

Libre de sustancias de la Alert List

Transparent information

Información transparente

Improvement recommendations

Antibacterial activity:

Lab certificate missing. To have acces to this certficate would increase your score in 2 points.

With these 2 points your product would achieve a silver medal.





FRIENDLY MATERIALS®
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Sample diploma

DIPLOMA

FRIENDLY MATERIALS® PRODUCT

YOUR LOGO HERE

Product name

77/90 FMP

BRONZE

2017/2018

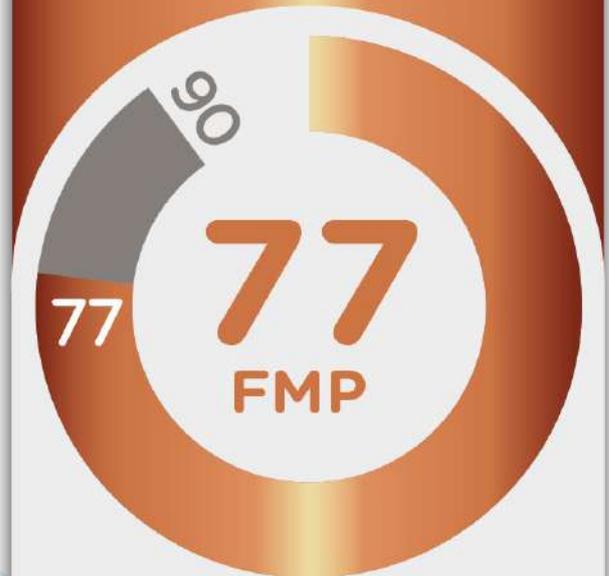
By means of this document, Friendly Materials® Inspired by PMMT declares that the product **PRODUCT NAME** from **MANUFACTURER** has achieved a score of 77/90_{FMP} qualifying with a **BRONZE** medal for the category “**indoor paint**”.

With such recognition, **MANUFACTURER** demonstrates to raise awareness on non-toxic built environments and on healthy building design, as well as promoting transparency on the building materials’ industry.

BRONZE

2017/2018

INDOOR PAINT CATEGORY



COMMERCIAL BRAND

EOA INDOOR PAINT

PRODUCT TYPE / TRADE NAME

00a 1553

MATTE ACRYLIC PAINT

GLOBAL SCORE



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



FRIENDLY MATERIALS
INSPIRED BY PMMT

HEALTH ASSESSMENT TOOL

04

Fees

www.friendlymaterials.com

It is a digital library of healthy materials for free consultation. We study and evaluate the level of health that construction materials provide to interior spaces and, based on our **algorithm**, we assign them a score from 0 to 100 FMP and corresponding gold, silver or bronze medals.

FRIENDLY MATERIALS®
YOUR HEALTHY
MATERIALS
GUIDE

Find the healthiest building materials on
the market

GO TO THE LIBRARY





Fees*

HOW TO JOIN OUR HEALTHY MATERIALS DATABASE?

Step 1 Select the desired fee.

Step 2 Submit the commercial agreement and the terms and conditions signed by the CEO or other person responsible for the products to montserrat.s@pmmtarq.com

Step 3 Send the documentation requested by PMMT to montserrat.s@pmmtarq.com

Note: The contract will be automatically extended for annual periods unless either party decides to terminate it, announcing it with a minimum period of one month to its expiration.

PREMIUM FEE

Product	Family x3	Family x5
750 €	1.200 €	1.600 €

INCLUDES:

- Product evaluation sheets (infocards)
- Accrediting diploma
- Publication of products on the web www.friendlymaterials.com as long as the product get at least a Bronze medal
- Evaluation report with recommendations for improvement

NOT INCLUDED:

- Laboratory analysis of the product composition
- Current VAT

UPDATE RENOVATION

Product	Family x3	Family x5
400 €	750 €	950 €

INCLUDES:

- Product update on the web
- Yearly meeting to agree on general aspects
- Annual report
- Reevaluation of assessed products
- Score update, in case the product has changed any of its parameters

NOT INCLUDED:

- Addition of products not stipulated in the contract
- Current VAT

BASIC FEE

Product	Family x3	Family x5
550 €	950 €	1.350 €

INCLUDES:

- Product evaluation sheets (infocards)
- Accrediting diploma
- Publication of products on the web www.friendlymaterials.com as long as the product get at least the Bronze medal

NOT INCLUDED:

- Laboratory analysis of the product composition
- Current VAT
- Evaluation report with recommendations for improvement

AUTOMATIC RENOVATION FEE

Product	Family x3	Family x5
250 €	300 €	350 €

INCLUDES:

- Product update on the web
- Yearly meeting to agree on general aspects
- Annual report

NOT INCLUDED:

- Addition of products not stipulated in the contract
- Current VAT

*In the event of annual revisions, fees outlined in this manual are subject to adjustment. Any changes will be communicated in writing and agreed upon by both parties prior to implementation.

friendlymaterials.com

Friendly Materials®' healthy materials guide is a tool accessible to any person, professional or company that wants to use the service to analyse and improve the health level of their spaces. Its purpose is to help its users to make informed decisions, identify what is available in the current market and contribute to the promotion of healthier spaces for people.

The Friendly Materials® website was the winner of the Archiboo Web Awards 2019 in the 'Best Consultants Website' category, being recognized internationally as the best consulting platform in the field of architecture.

The Friendly Materials® platform was described by the jury as "a great effort to promote transparency in the healthy building materials industry and to spread the importance of non-toxic built environments and the design of healthy spaces for people". The awards also highlighted the fact that the website clearly, creatively and effectively presents complex information with the user's perspective in mind.

Friendly Materials®' website has a triple vocation:

- First, to provide a free and open access to the online library, which compiles technical information of building materials in an easy and understandable way.
- Second, to offer architects, engineers and manufacturers an evaluation service of the impact that products and building materials have on the interior spaces health level and, consequently, on the health of its occupants.
- Third, to provide a consulting service which studies and analytically assesses interior spaces, and suggests improvement actions that contribute to increase the health level of the studied spaces.



Companies aligned with a better future outlook





Premios



PREMIO ARQUITECTURA
PREMIO PROFESIÓN,
VALORES PROFESIONALES 2021
EDIFICIO HOSPITALARIO POLIVALENTE
PARC SANITARI PERE VIRGILI
CSCAE



PREMIO ANELLS DE LA FUSTA 2023
ARQUITECTURA
GREMI FUSTA I MOBLE
PIN8 HOUSE



XXV PREMIO DE ARQUITECTURA
COMARQUES DE GIRONA
2023 COAC
PIN8 HOUSE



XIX PREMIO CATALUNYA
CONSTRUCCIÓ 2022,
CLÍNICA GIRONA
CATEB



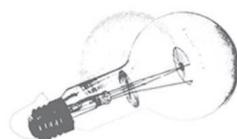
PREMIO DE ARQUITECTURA ESPAÑOLA
INTERNACIONAL 2017
HOSPITAL DE MENONGUE, ANGOLA
CSCAE



PALMARÉS ARCHITECTURE
ALUMINIUM TECHNAL
EDICIÓN 2015



UIA FRIENDLY AND INCLUSIVE SPACES
AWARD 2017
CON CLEAR CODE ARCHITECTURE



X BIENNIAL ALEJANDRO DE LA SOTA
MOSTRA D'ARQUITECTURA DE
TARRAGONA 2017
MERCADO DE CREIXELL, TARRAGONA



PREMIO "ARCHDAILY BEST BUILDING OF
THE WORLD" 2014



PREMIO FAD 2014 DE ARQUITECTURA
INTERNACIONAL



PREMIO IX BIAU, BIENAL IBEROAMERICANA
DE ARQUITECTURA Y URBANISMO
ROSARIO 2014



MUESTRA DE ARQUITECTURA
INTERNACIONAL CATALANA. 2A EDICIÓN
TR-HOUSE, BARCELONA



WANT TO KNOW MORE?

www.friendlymaterials.com

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