



# EPD Transparency Brief

**COMPANY NAME** Forbo Flooring System

**PRODUCT TYPE** Resilient Linoleum Floor Covering

**PRODUCT NAME** Marmoleum 2.5mm

**PRODUCT DEFINITION** Marmoleum is a linoleum floor covering complying with all requirements of EN-ISO 24011: Specification for plain and decorative linoleum.

**PRODUCT CATEGORY RULE (PCR)** **PCR- Flooring**  
Including: Carpet, Resilient, Laminate, Ceramic, Wood (NSF 2012)

**CERTIFICATION PERIOD** November 12, 2012 - November 12, 2017

**DECLARATION NUMBER** 12CA64879.101.1



## LIFECYCLE IMPACT CATEGORIES

The environmental impacts listed below were assessed throughout the product's lifecycle – including raw material extraction, transportation, manufacturing, packaging, use, and disposal at end of life.

	ATMOSPHERE			WATER		EARTH	
	<b>Global Warming Potential</b> refers to long-term changes in global weather patterns – including temperature and precipitation – that are caused by increased concentrations of greenhouse gases in the atmosphere.	<b>Ozone Depletion Potential</b> is the destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation that's harmful to life, caused by human-made air pollution.	<b>Photochemical Ozone Creation Potential</b> happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce a type of air pollution known as smog.	<b>Acidification Potential</b> is the result of human-made emissions and refers to the decrease in pH and increase in acidity of oceans, lakes, rivers, and streams – a phenomenon that pollutes groundwater and harms aquatic life.	<b>Eutrophication Potential</b> occurs when excessive nutrients cause increased algae growth in lakes, blocking the underwater penetration of sunlight needed to produce oxygen and resulting in the loss of aquatic life.	<b>Depletion of Abiotic Resources (Elements)</b> refers to the reduction of available non-renewable resources, such as metals and gases, that are found on the periodic table of elements, due to human activity.	<b>Depletion of Abiotic Resources (Fossil Fuels)</b> refers to the decreasing availability of non-renewable carbon-based compounds, such as oil and coal, due to human activity.
<b>TRACI</b>							
<b>CML</b>	6.16 kg CO2 eq	2.63E-08 kg CFC-11 eq	2.12E-03 kg C2H4	4.81E-02 kg SO2 eq	1.15E-02 kg PO4 eq	3.34E-06 kg Sb-Equiv.	55.74 MJ

**FUNCTIONAL UNIT** The functional unit is one square meter of installed product and the use stage is considered for one year of service life.





## MATERIAL CONTENT

Material content measured to 1%.

COMPONENT	MATERIAL	AVAILABILITY	MASS%	ORIGIN
Binder	Linseed Oil	Bio-based Crop	19	N. America/Europe
Binder	Gum Rosin	Bio-based Crop	2	Indonesia/China
Binder	Tall Oil	Bio-based waste product from paper industry	11	USA
Filler	Wood Flour	Bio-based waste product from wood processing	22	Germany
Filler	Calcium carbonate	Abundant Mineral	24	Germany
Filler	Reused Marmoleum	Reused Material	10	Internal
Pigment	Titanium dioxide	Limited Mineral	2	Global
Pigment	Various other pigments	Limited Mineral	1	Global
Backing	Jute	Bio-based Crop	8	India/Bangladesh
Finish	Lacquer	Non-Renewable	1	Netherlands

## ADDITIONAL ENVIRONMENTAL INFORMATION

PRE-CONSUMER RECYCLED CONTENT	43 %
POST-CONSUMER RECYCLED CONTENT	0 %
VOC EMISSIONS	CHPS 13050
WATER CONSUMPTION	62.2 cubic meters

## ENERGY

RENEWABLE ENERGY	49 %	55.91 MJ
NON-RENEWABLE ENERGY	51 %	57.61 MJ

## MANUFACTURER CONTACT INFO

NAME	Forbo Flooring Systems
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## RECYCLING OR REUSE

Marmoleum can be recycled or composted.

Check with your local Forbo business unit as it pertains to material take back or reclamation program.

## STANDARDS

ASTM F2043  
 EN-ISO 24011  
 EN 13501-1  
 EN 13893  
 EN 1815  
 EN 12524  
 ASTM E648/NFPA 258  
 ASTM E662/NFPA 258  
 CAN ULC S102.2  
 ISO 9001  
 ISO 14001  
 OHSAS 18001

## CERTIFICATIONS

