



EPD Transparency Brief

COMPANY NAME Forbo Flooring System

PRODUCT TYPE Resilient Linoleum Floor Covering

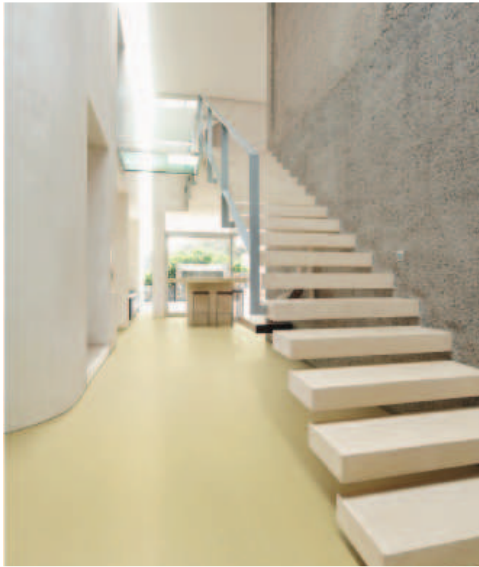
PRODUCT NAME Marmoleum 2.0mm

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	
	Global Warming Potential 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.	Ozone Depletion Potential 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.	Photochemical Ozone Creation Potential happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce a type of air pollution known as smog.	Acidification Potential 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.	Eutrophication Potential 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.	Depletion of Abiotic Resources (Elements) 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.	Depletion of Abiotic Resources (Fossil Fuels) refers to the decreasing availability of non-renewable carbon-based compounds, such as oil and coal, due to human activity.
TRACI							
CML	5.45 kg CO2 eq	2.59E-08 kg CFC-11 eq	1.82E-03 kg C2H4	3.93E-02 kg SO2 eq	9.29E-03 kg PO4 eq	2.87E-06 kg Sb-Equiv.	52.19 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

