Environmental
Product
Declaration

ISO14025+EN15804+A2 Bepalingsmethode
'Milieuprestatie Bouwwerken' versie 2.0-juli 2026

This declaration is for:
Silicone Roofing TG

Provided by:
Global Paint Products B.V.



MRPI® registration:
00155.2026.1.0
Program operator:
Stichting MRPI
Publisher:
Stichting MRPI
www.mrpi.nl

Date of first issue:
10-11-2026
Date of this issue:
10-11-2026
Expiry date:
10-11-2031

ECO PLATFORM EPD VERIFIED

Nationale MILIEUDATABASE

MRPI milieu relevante product informatie

COMPANY INFORMATION

Global Paint Products B.V.
Veesteeg 11-13
6657KH

Boven-Leeuwen
Netherlands
+31-487595160

https://globalpaint.com

MRPI® REGISTRATION

00155.2026.1.0

DATE OF THIS ISSUE

10-11-2026

EXPIRY DATE

10-11-2031

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Vroege, Gert-Jan,Eco-Intelligence. The LCA study has been done by Chiara, Zenaro, Hedgehog Company B.V.. The certificate is based on a LCA-dossier According to ISO14025+EN15804+A2 Bepalingsmethode ‘Milieuprestatie Bouwwerken’ versie 2.0-juli 2026. It is verified according to the. 'Verification protocol for MRPI LCA project report & EPD 16th of April 2026, V. 5.3'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2.

PROGRAM OPERATOR

Stichting MRPI
Kingsfordweg 151
1043 GR
Amsterdam

PRODUCT

Silicone Roofing TG

DECLARED AND FUNCTIONAL UNIT

Area (1 m2)

DESCRIPTION OF PRODUCT

The Silicone Roofing TG is a liquid roofing system, based on silicone binder. It is suitable for application on flat roofs as well as roofs with slope. It can be used on bitumen, EPDM, various types of wood, stainless steel, PVC, and concrete. After proper pretreatment, it is also suitable for use on galvanized steel, lead, and zinc. Due to its high resistance to UV radiation and standing water, it extends the service life of roof surfaces, while providing solar reflection that improves solar panel yield and contributes to energy savings.

VISUAL PRODUCT



MORE INFORMATION

https://globalpaint.com/nl/nl/verfassortiment/silicone_roofing_tg/dakcoating/silicone_roofin

Ing. L. L. Oosterveen MSc. MBA **Managing Director MRPI**	Demonstration of verification
	CEN standard EN15804 serves as the core PCR [1]
	Independent verification of the declaration and data ISO14025+EN15804+A2 Bepalingsmethode ‘Milieuprestatie Bouwwerken’ versie 2.0-juli 2026 Internal: External: X
	Independent verifier: Vroege, Gert-Jan, Eco-Intelligence. Cerified NMD verifier.
	
	[1] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

The Silicone Roofing TG features a density of 1.22 kg/L at 20°C, and coverage of 1.2 kg per square meter. It can be applied by spray or via brush (using a single-use roller), and during the drying process it realises volatile organic compounds. According to the product information sheet, emissions to air are within the maximum EU limit value of A/d: 130 g/l volatile organic compounds. The reference service life (RSL) is 20 years, according to Global Paint Products B.V..

Component (> 1%)	(kg / %)
Chemical compounds	1.2
Cleaning solvent	0.001
Tin plated steel - packaging	0.077
Galvanised steel - packaging	0.019
PP - packaging	0.001
Pallet - packaging	0.004
Bioplastic - packaging	0.001

Biogenic carbon content	Unit	Amount of uptake per functional unit
Biogenic carbon content in product	Kg C	0
Biogenic carbon content in accompanying packaging	Kg C	1.7E-3
Note that 1 kg of biogenic carbon is equivalent to 44 / 12 kg of CO2.		

SCOPE AND TYPE

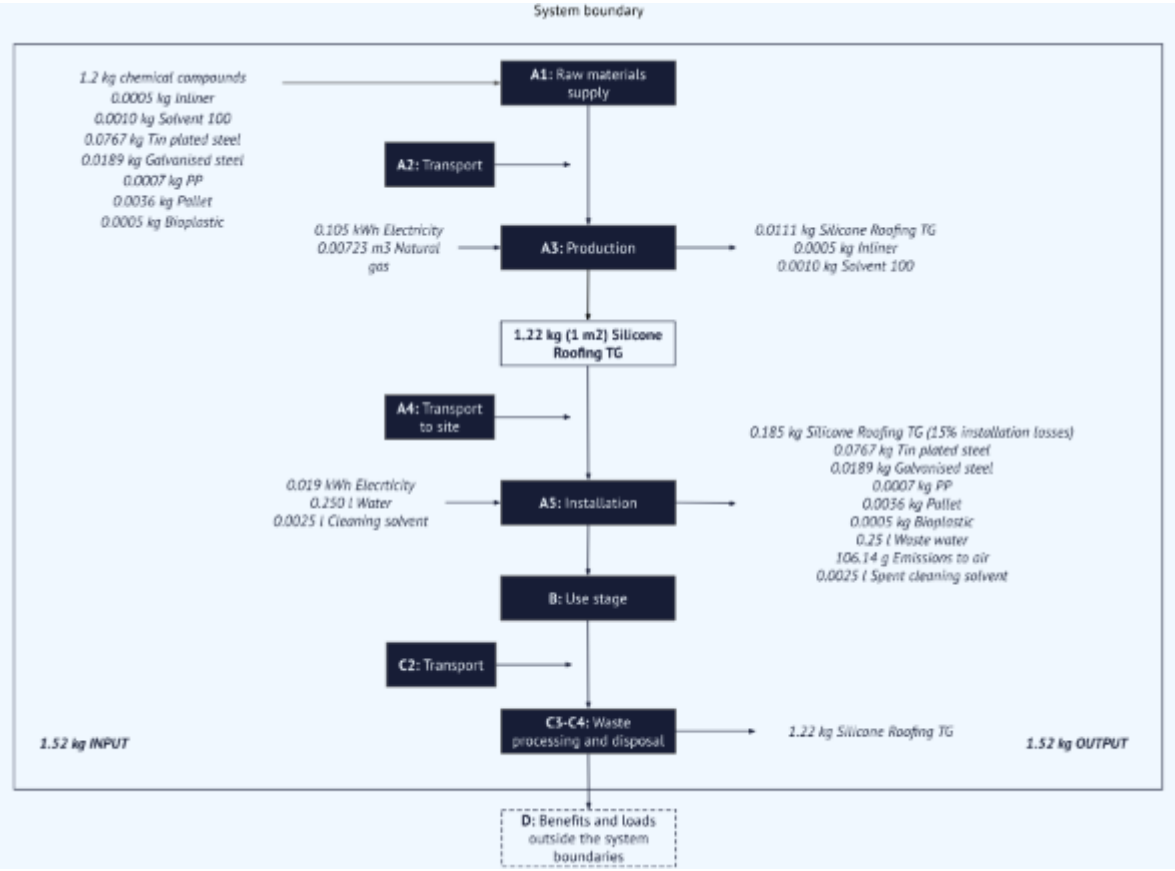
Background database: Ecoinvent 3.9.1
Method: Cut-off, EN 15804+A2
Software: Simapro 10.5
Characterization factor: Environmental Footprint (EF) 3.1

The Silicone roofing TG is produced in Boven-Leeuwen, the Netherlands. It is marketed in Europe, where it is processed at its end-of-life. For calculations, Simapro v10.5 (June 2026) is used, together with Ecoinvent v3.9.1 (December 2022) as background database. The most recent version of the JRC characterisation factors EF3.1 cut-off (July 2022) is applied. This is a product specific EPD.

ECO PLATFORM EPD VERIFIED
Nationale MILIEUDATABASE
MRPI milieu relevante product informatie

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport gate to site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse - Recovery - Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
x	x	x	x	x	x	x	x	x	x	ND	ND	x	x	x	x	x

X = Modules Assesed
ND = Not Declared



ENVIRONMENTAL IMPACT PER FUNCTIONAL UNIT OR DECLARED UNIT (CORE INDICATORS A2)

Unit		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO2 eq	3.56E+00	1.18E-01	3.87E-02	3.72E+00	2.98E-02	1.04E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.73E-02	3.06E+00	0.00E+00	-6.68E-01
GWP-fossil	kg CO2 eq	3.56E+00	1.18E-01	3.87E-02	3.72E+00	2.97E-02	1.04E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.72E-02	3.06E+00	0.00E+00	-6.68E-01
GWP-biogenic	kg CO2 eq	-6.23E-03	0.00E00	0.00E+00	-6.23E-03	0.00E+00	6.25E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GWP-luluc	kg CO2 eq	2.83E-03	4.20E-04	1.72E-05	3.26E-03	1.06E-04	6.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	9.68E-05	7.50E-04	0.00E+00	-2.05E-05
ODP (A2)	kg CFC11 eq	1.24E-06	2.09E-09	2.75E-09	1.24E-06	5.28E-10	2.29E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	4.83E-10	2.02E-07	0.00E+00	-3.45E-08
AP mol H+	mol H+ eq	1.81E-02	5.64E-04	8.48E-05	1.88E-02	1.42E-04	3.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	1.30E-04	4.28E-03	0.00E+00	-5.69E-04
EP-freshwater	kg P eq	1.25E-04	1.17E-06	9.28E-07	1.27E-04	2.95E-07	2.91E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.70E-07	6.50E-05	0.00E+00	4.09E-06
EP-marine	kg N eq	3.16E-03	2.14E-04	1.73E-05	3.39E-03	5.40E-05	6.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	4.94E-05	9.61E-04	0.00E+00	-1.82E-04
EP-terrestrial	mol N eq	3.64E-02	2.28E-03	1.90E-04	3.89E-02	5.76E-04	7.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	5.27E-04	1.04E-02	0.00E+00	-2.24E-03
POCP kg NMVOC	kg NMVOC eq	1.37E-02	7.80E-04	7.96E-05	1.46E-02	1.97E-04	1.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	1.80E-04	3.91E-03	0.00E+00	-1.33E-03
ADP-minerals & metals	kg Sb eq	3.12E-05	3.69E-07	3.19E-07	3.19E-05	9.30E-08	4.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	8.51E-08	3.89E-06	0.00E+00	2.88E-08
ADP-fossil	MJ, net calorific value	5.79E+01	1.69E00	4.45E-01	6.00E+01	4.25E-01	1.18E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	3.89E-01	1.48E+01	0.00E+00	-9.93E+00
WDP	m3 world eq. Deprived	4.68E+00	1.03E-02	7.62E-03	4.69E+00	2.61E-03	7.70E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.39E-03	4.09E-01	0.00E+00	-3.88E-02

GWP-total = Global Warming Potential total
GWP-fossil = Global Warming Potential fossil fuels
GWP-biogenic = Global Warming Potential biogenictotal
GWP-LULUC = Global Warming Potential land use and land use change
ODP = Depletion potential of the stratospheric ozone layer
AP = Acidification Potential, Accumulated Exceedence
AP-freshwater = Eutrophication Potential, fraction of nutrients reaching freshwater end compartment
EP-marine = Eutrophication Potential, fraction of nutrients reaching marine end compartment
EP-terrestrial = Eutrophication Potential, Accumulated Exceedence
POCP = Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals & metals = Abiotic Depletion Potential for non-fossil resources [1]
ADP-fossil = Abiotic Depletion for fossil resources potential [1]
WDP = Water (user) deprivation potential, deprivation-weighted water consumption [1]

Disclaimer [1]:
- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience withthe indicator.

ECO PLATFORM EPD VERIFIED
Nationale MILIEUDATABASE
MRPI milieu relevante product informatie

ENVIRONMENTAL IMPACT PER FUNCTIONAL UNIT OR DECLARED UNIT (ADDITIONAL INDICATORS A2)

Unit		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PM	Disease incidence	1.99E-07	1.16E-08	8.26E-10	2.11E-07	2.93E-09	3.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.68E-09	4.65E-08	0.00E+00	-7.77E-09
IRP	kBq U235 eq	1.24E-01	6.58E-04	3.54E-04	1.25E-01	1.66E-04	2.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	1.52E-04	2.02E-02	0.00E+00	2.12E-04
ETP-fw	CTUe	3.88E+01	1.24E00	5.05E-01	4.06E+01	3.14E-01	1.51E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.87E-01	4.69E+01	0.00E+00	3.47E-01
HTP-c	CTUh	3.81E-09	6.23E-11	3.10E-11	3.90E-09	1.57E-11	7.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	1.44E-11	1.84E-09	0.00E+00	6.38E-10
HTP-nc	CTUh	3.94E-08	1.35E-09	4.36E-10	4.12E-08	3.42E-10	1.54E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	3.13E-10	1.45E-08	0.00E+00	5.31E-09
SQP	-	1.77E+01	1.33E00	5.86E-02	1.91E+01	3.36E-01	3.46E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	3.07E-01	2.75E+00	0.00E+00	-2.17E-01

PM = Potential incidence of disease due to particulate matter emissions
IRP = Potential Human exposure efficiency relative to U235 [1]
ETP-fw = Potential Comparative Toxic Unit for ecosystems [2]
HTP-c = Potential Comparative Toxic Unit for humans, cancer [2]
HTP-nc = Potential Comparative Toxic Unit for humans, non-cancer [2]
SQP = Potential soil quality index [2]

Disclaimer [1]:
- This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste.

Disclaimer [2]:
- The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

OUTPUT FLOWS AND WASTE CATEGORIES PER FUNCTIONAL OR DECLARED UNIT (A1 AND A2)

Unit		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	1.39E-04	1.08E-05	4.15E-06	1.54E-04	2.71E-06	3.94E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.48E-06	9.89E-05	0.00E+00	0.00E+00
NHWD	kg	4.91E-01	1.11E-01	8.32E-03	6.11E-01	2.81E-02	1.90E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	2.57E-02	5.76E-01	0.00E+00	0.00E+00
RWD	kg	9.28E-05	3.86E-07	2.48E-07	9.35E-05	9.73E-08	1.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	8.90E-08	1.41E-05	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E00	0.00E+00	0.00E+00	0.00E+00	2.88E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E00	0.00E+00	0.00E+00	0.00E+00	9.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ	0.00E+00	0.00E00	2.35E-02	2.35E-02	0.00E+00	3.31E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	7.17E+00	0.00E+00	0.00E+00
ETE	MJ	0.00E+00	0.00E00	4.04E-02	4.04E-02	0.00E+00	5.70E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.24E+01	0.00E+00	0.00E+00

HWD = Hazardous Waste Disposed
NHWD = Non Hazardous Waste Disposed
RWD = Radioactive Waste Disposed
CRU = Components for reuse
MFR = Materials for recycling
MER = Materials for energy recovery
EEE = Exported Electrical Energy
ETE = Exported Thermal Energy

ECO PLATFORM EPD VERIFIED
Nationale MILIEUDATABASE
MRPI milieu relevante product informatie

RESOURCE USE PER FUNCTIONAL OR DECLARED UNIT (A1 AND A2)

Unit		A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	5.51E+00	2.38E-02	4.34E-01	5.97E+00	6.01E-03	1.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	5.50E-03	6.38E-01	0.00E+00	0.00E+00
PERM	MJ	5.04E-02	0.00E00	0.00E+00	5.04E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	5.56E+00	2.38E-02	4.34E-01	6.02E+00	6.01E-03	1.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	5.50E-03	6.38E-01	0.00E+00	0.00E+00
PENRE	MJ	1.10E+01	1.69E00	4.45E-01	1.31E+01	4.26E-01	1.18E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	3.90E-01	1.48E+01	0.00E+00	0.00E+00
PENRM	MJ	4.69E+01	0.00E00	0.00E+00	4.69E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	5.79E+01	1.69E00	4.45E-01	6.00E+01	4.26E-01	1.18E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	3.90E-01	1.48E+01	0.00E+00	0.00E+00
SM	kg	1.98E-02	0.00E00	0.00E+00	1.98E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	1.22E-01	4.34E-04	2.28E-04	1.22E-01	1.09E-04	2.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	1.00E-04	1.08E-02	0.00E+00	0.00E+00

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials
PERM = Use of renewable primary energy resources used as raw materials
PERT = Total use of renewable primary energy resources
PENRE = Use of non-renewable primary energy resources excluding non-renewable energy resources used as raw materials
PENRM = Use of non-renewable primary energy resources used as raw materials
PENRT = Total use of non-renewable primary energy resources
SM = Use of secondary materials
RSF = Use of renewable secondary fuels
NRSF = Use of non-renewable secondary fuels
FW = Use of net fresh water

ECO PLATFORM EPD VERIFIED
Nationale MILIEUDATABASE
MRPI milieu relevante product informatie

CALCULATION RULES

The cut-off criteria for data gaps are 1% of renewable and nonrenewable energy usage and 1% of the total mass input of that unit process. The total of excluded input per module does not exceed 5% of energy usage and mass input. Processes falling under the cut-off rules are: capital goods in foreground processes; reusable equipment for the application of the Silicone Roofing TG on roofs; white spirit used to clean accidental spill of material during the installation.

Data collection period refer to the year 2025. All identified environmental interventions have been translated into environmental effects. The time representativeness of the used references for generic data is good, since the difference between the reference year (2025) and the time period for which the datasets are representative (2022) is <6 years. The geographical coverage of this study is representative of the geographical scope of the production process. Where possible, specific country specific references are selected. Where this is not possible, region-specific references are selected. The quality level ranges from good to very good. The technological coverage of this study is representative as specific business, product, and process data of the year 2025 are used to model the product system under study. However, proxies are largely used to model the chemical compounds, which may make the technological process deviate from reality. Therefore, the data quality is fair.

In this study, allocation is needed to estimate the gas use that Global Paint Products B.V. deploys to store the Silicone Roofing TG. The storage in fact contains other products than the one under study. Considering that the production of Silicone Roofing TG in 2025 amounted to only 0.647% of the total production, revenues from this product can be considered low compared to the total revenue. Thus, a mass allocation is performed.
The deconstruction of the Silicone Roofing TG is consequential to the deconstruction of the roof on which it is applied. The roof, and not the silicone coating, is the main product considered by the dismantling process. Therefore, any energy and material inputs needed for the deconstruction, should be allocated to the roof and not to the Silicone Roofing TG.
At the system boundary, cut-off allocation are applied. All unit processes before the point of end-of-waste are assigned to the product system in exam. All unit processes after the point of end-of-waste are assigned to the subsequent product system.

DATA QUALITY

Data quality has been assessed according to Table E.1 of EN15804+A2.

The time representativeness of the used references for generic data is good, since the difference between the reference year (2025) and the time period for which the datasets are representative (2022) is <6 years.
The geographical coverage of this study is representative of the geographical scope of the production process. Where possible, specific country specific references are selected. Where this is not possible, region-specific references are selected. The quality level ranges from good to very good.
The technological coverage of this study is representative as specific business, product, and process data of the year 2025 are used to model the product system under study. However, proxies are largely used to model the chemical compounds, which may make the technological process deviate from reality. Therefore, the data quality is fair. Fair data contribute more than 30% to all impact categories except POPC.

POWER MIX

Global Paint Products B.V. used 100% green electricity in 2025. They purchased and consumed wind energy from Vattenfall, a Dutch energy provider and self-produced solar energy. The energy consumption mix is 23% self-produced solar energy, and 77% purchased wind energy. Documentation regarding the energy self-produced and purchased from Vattenfall has been provided. Moreover, Vattenfall supplied a Power Purchased Agreement (PPA) containing all the mandatory aspects required by ECO Platform. Double counting of electricity is thus avoided.
Electricity is modelled with a market-based approach, using the reference for solar-energy production in the Netherlands: 0368-pro&1 kWh, opgewekt met multi-Si PV-paneel (zonder net) (o.b.v. Electricity, low voltage {NL}| electricity production, photovoltaic, 3kWp slanted-roof installation, multi-Si, panel, mounted | Cut-off, U); and the reference for wind-energy production in the Netherlands: 0743-pro&Elektriciteit, hernieuwbaar, van windturbines, mix 2023 (37% zee en 63% land), bij consument, per kWh (o.b.v. zie toelichting in proces), (01-2031).
The solar energy has a GWP-total of 0.096 kg CO2-eq/kWh, and the wind energy has a GWP-total of 0.021 kg CO2-eq/kWh.

Global Paint Products B.V. also uses natural gas for the heating of the storage space of its products. Natural gas is modelled as residual mix, using the reference 0863-pro&Subkaart; Aardgas, verbrand, bij consument, per m^3 (A1-A3) (o.b.v. zie toelichting in proces), (01-2031).

ECO PLATFORM EPD VERIFIED
Nationale MILIEUDATABASE
MRPI milieu relevante product informatie

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

The Silicone Roofing TG production starts with the collection of the raw materials. Most of the chemicals used to produce the Silicone Roofing TG do not have a LCA or EPD, thus the modelling of these materials relies on proxies, such as Silicone product {RER}| silicone product production | Cut-off, U and Chemical, organic {GLO}| chemical production, organic | Cut-off, U. The packaging is composed of metal drums (modelled with 20.7% of secondary steel), transported on a pallet and wrapped in bioplastic.

The raw materials are transported from the supplier to the manufacturing site by truck. Here, the chemicals are blended inside a reactor to manufacture the Silicone Roofing TG. Then, the product is transferred into a metal drum using a funnel lined with an inliner. The use of the inliner avoids having to swap out the funnel after each pour, which would otherwise occur because the material adheres to its inner surface. Once used, the inliner is thrown away along with the residual material adhering to it, resulting in a manufacturing loss of 0.0111 kg of Silicone Roofing TG. A cleaning solvent is used to clean the mixing equipment. The inliner, the residual material and the cleaning solvent undergo 100% incineration.

The electricity used for the manufacturing process has been calculated by Global Paint Products B.V. by considering the power of the mixer and the mixing time of one batch of product. Global Paint Products B.V. used 100% green electricity in 2025, with an energy consumption mix made of 23% self-produced solar energy, and 77% purchased wind energy. Global Paint Products B.V. also uses natural gas for the heating of the storage space of its products. The amount of gas per functional unit is allocated based on production volumes, since Global Paint Products B.V. produces and stores multiple products.

In line with the assessment method, the distance to the construction site is assumed to be 150 km, since primary data was not available. The transportation mode is by truck.

Professional cleaning contractors are engaged to perform roof cleaning during installation. The roof is cleaned with high-pressured water. Because discharging the wastewater directly into stormwater drainage systems is not allowed, it is gathered and transported to a licensed wastewater treatment facility. Afterwards, a vacuum cleaner dries up the roof.

The Silicone Roofing TG is then applied via brush with a single-use roller or spray. Since data on the means of application was not available, conservative assumption uses 100% of application via brush with a single-use roller. The single-use roller is discarded after every use.

Following the assessment method, 15% of construction waste is thus accounted for. The packaging is excluded from construction losses because it consists of a single product unit (a metal drum), making it unlikely that any portion of it would be misplaced or lost during installation. The waste treatment of the packaging is also considered.

The manufacturer indicated that, during the drying phase of the applied Silicone Roofing TG, a mass loss of 8.7% occurs, with the release of emissions to air. These emissions are modelled conservatively as non-methane volatile organic compounds (NMVOC).

During the use stage, no additional material or energy inputs are required.

The end-of-life stage starts with the deconstruction stage, followed by the transport of the material streams to further waste processing and final disposal. All energy and material inputs associated with the deconstruction of the roof painted with the Silicone Roofing TG should be allocated to the roof and not to the silicone coating. The end-of-life is according to the NMD scenario 2- afwerkingen verkleefd aan hout, kunststof, metaal.

DECLARATION OF SVHC

None of the materials is classified as Substances of Very High Concern (SVHC) in the REACH Candidate List.

REFERENCES

[1] 'ISO 14040: Environmental management - Life cycle assessment – Principles and Framework', International Organisation for Standardisation, ISO14040:2006.
[2] 'ISO 14044: Environmental management - Life cycle assessment- Requirements and guidelines', International Organisation for Standardisation, ISO14044:2006.
[3] 'Environmental Performance Assessment Method for Construction Works', in Dutch - 'Bepalingsmethode Milieuprestatie Bouwwerken', Stichting Nationale Milieudatabase, version 2.0, February 2025.
[4] 'NEN-EN 15804+A2: Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products', NEN-EN 15804:2012+A2:2019.
[5] Stichting Nationale Milieudatabase. (2026, July). NMD Verification protocol version 2.0.1. https://milieudatabase.nl/en/environmental-data-lca/verifying-environmental-data/nmd-verification-protocol/

ECO PLATFORM EPD VERIFIED

Nationale MILIEUDATABASE

MRPI milieu relevante product informatie

[6] Milieu relevante product informatie. (n.d.). https://www.mrpi.nl/
[7] ECO PLATFORM. (2024). LCA Calculation Rules and Specifications for EPDs. In ECO PLATFORM. https://www.eco-platform.org/files/download/Documents/2025/LCA%20Calculation%20Rules%20V2.0.pdf
[8] IVL Swedish Environmental Research Institute, EPD International Secretariat [IVL]. (2025). PCR 2019:14 Construction products (EN 15804:A2) (2.0.1). In The International EPD System.
[9] PubChem. (n.d.). Benzene. PubChem. https://pubchem.ncbi.nlm.nih.gov/compound/Benzene#section=Flash-Point