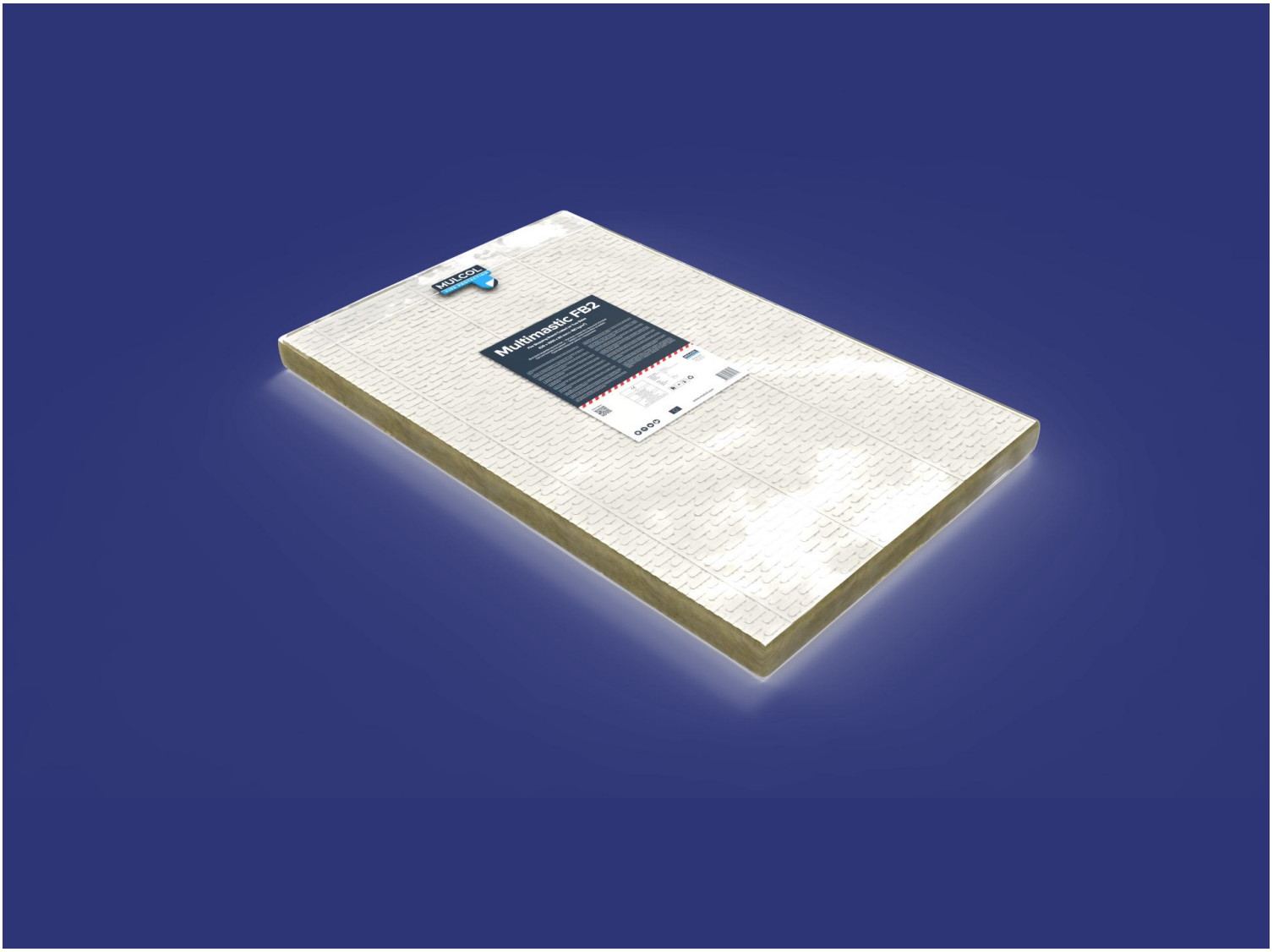
MULCOL
FIRE PROTECTION

Environmental
Product
Declaration

According to EN15804+A2 (+indicators A1)

This declaration is for:
Multimastic FB2

Provided by:
Mulcol International



MRPI® registration:
1.1.00587.2024

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

Date of first issue:
12-7-2024
Date of this issue:
11-6-2026
Expiry date:
12-7-2029

ECO PLATFORM EPD VERIFIED

Nationale MILIEUDATABASE

MRPI milieu relevante product informatie

COMPANY INFORMATION

Mulcol International
Promenade 75
5401 GM
Uden
Netherlands
+31 (0) 118726140
info@mulcol.com
https://www.mulcol.com/

PRODUCT

Multimastic FB2

DECLARED UNIT / FUNCTIONAL UNIT

1 Piece

DESCRIPTION OF PRODUCT

Multimastic FB2 is a fire stopping board

MRPI® REGISTRATION

1.1.00587.2024

DATE OF THIS ISSUE

11-6-2026

VISUAL PRODUCT

EXPIRY DATE

12-7-2029

SCOPE OF DECLARATION

This MRPI®-EPD certificate is verified by Anne Kees Jeeninga, Advieslab. The LCA study has been done by Martijn Blaak, EcoReview. The certificate is based on an LCA-dossier according to EN15804+A2 (+indicators A1). It is verified according to the 'Verification protocol for MRPI LCA project report & EPD 21th of May 2025, V. 5.2'. EPDs of construction products may not be comparable if they do not comply with EN15804+A2. Declaration of SVHC that are listed on the 'Candidate list of Substances of Very High Concern for authorisation' when content exceeds the limits for registration with ECHA.

PROGRAM OPERATOR

Stichting MRPI®
Kingsfordweg 151
1043 GR
Amsterdam

MORE INFORMATION

https://www.mulcol.com/multimastic-fb

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 according to EN15804+A2 (+indicators A1) Internal: External: X
	Third party verifier: Anne Kees Jeeninga, Advieslab
	[1] PCR = Product Category Rules

DETAILED PRODUCT DESCRIPTION

Multimastic FB1 is a fire stopping board made of a high-density rock wool core, treated with Multimastic C firestop coating on one side. Multimastic FB fire stopping boards make it possible to seal off larger openings, creating a fire-resistant and smoke-proof seal to adjacent rooms. Multimastic FB fire stopping boards form part of the Mulcol® Penetration Seal System. Multimastic FB fire stopping boards can also be used in combination with the Multimastic SP fire stopping mastic and Multimastic C firestop coating. Multimastic FB1 is 50 mm thick with dimensions 1000 x 625 mm. The reference service life of Multimastic FB1 is 25 years.

Component (> 1%)	(kg / %)
Stone wool plate	76,12%
Polymer	6,82%
Water	5,54%
Filler	6,20%
Flame retardant	3,30%
Packaging	1,05%

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	0
Note that 1 kg of biogenic carbon is equivalent to 44 / 12 kg of CO2.		

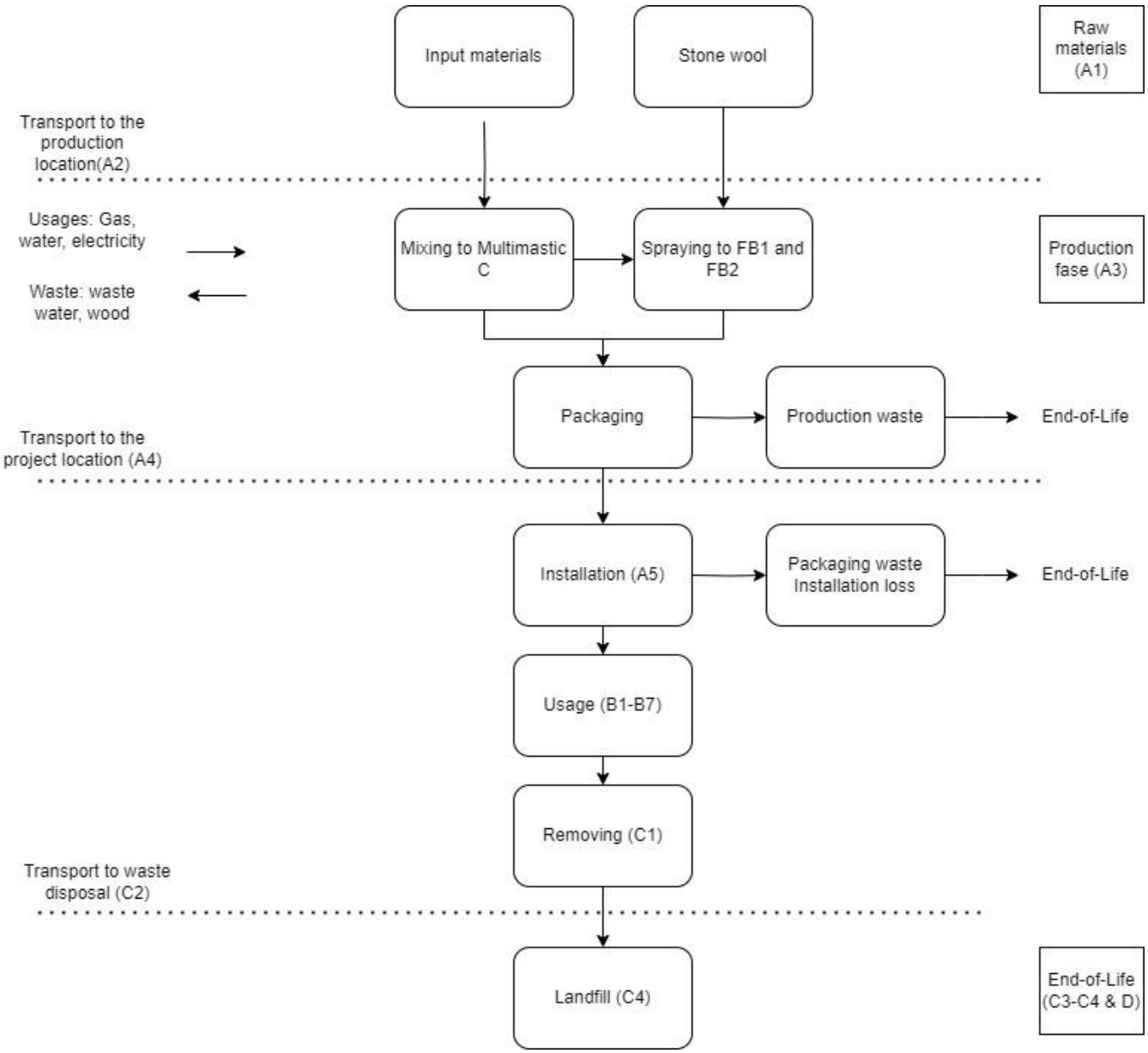
SCOPE AND TYPE

The LCA study is a cradle-to-gate (A-D) in accordance with the EN15804+A2 and the Dutch Determination methor (Bepalingsmethode "Milieuprestatie Bouwwerken" versie 1.1 march 2022). The product is produced in the Netherlands and application of the results is only representable for products sold from the Oss facility. Simapro 9.5.0.0 software was used, using NMD 3.7 and Ecoinvent 3.6 databases.

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	x	x	x	x	x	x	x

X = Modules Assessed

ND = Not Declared


Input materials
Stone wool
Raw materials (A1)
Transport to the production location(A2)
Usages: Gas, water, electricity
Waste: waste water, wood
Mixing to Multimastic C
Spraying to FB1 and FB2
Production fase (A3)
Packaging
Production waste
End-of-Life
Transport to the project location (A4)
Installation (A5)
Packaging waste Installation loss
End-of-Life
Usage (B1-B7)
Removing (C1)
Transport to waste disposal (C2)
Landfill (C4)
End-of-Life (C3-C4 & D)

MULCOL
FIRE PROTECTION

ENVIRONMENTAL IMPACT per functional unit or declared unit (indicators A1)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADPE	kg Sb eq.	2,40E-04	9,36E-06	1,83E-05	2,68E-04	1,84E-06	4,08E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,35E-06	1,18E-06	0,00E+00	0,00E+00
ADPF	MJ	1,74E+02	8,46E+00	2,64E+01	2,09E+02	1,66E+00	3,21E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,06E-01	2,81E+00	0,00E+00	0,00E+00
GWP	kg CO2 eq.	1,06E+01	5,45E-01	1,46E+00	1,26E+01	1,07E-01	2,66E+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	5,27E-02	4,97E+00	0,00E+00	0,00E+00
ODP	kg CFC11 eq.	6,24E-07	1,03E-07	1,37E-07	8,65E-07	2,02E-08	1,38E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,36E-09	2,33E-08	0,00E+00	0,00E+00
POCP	kg ethene eq.	1,21E-02	3,32E-04	3,84E-04	1,28E-02	6,51E-05	2,10E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,18E-05	1,12E-03	0,00E+00	0,00E+00
AP	kg SO2 eq.	7,47E-02	1,42E-03	3,37E-03	7,95E-02	2,78E-04	1,22E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,32E-04	1,13E-03	0,00E+00	0,00E+00
EP	kg (PO4) 3 eq.	6,33E-03	2,34E-04	4,42E-04	7,00E-03	4,58E-05	1,77E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,56E-05	4,70E-03	0,00E+00	0,00E+00

Toxicity indicators and ECI (Dutch market)

HTP	kg DCB eq.	6,79E+00	1,17E-01	6,30E-01	7,53E+00	2,30E-02	1,17E+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	2,22E-02	2,07E-01	0,00E+00	0,00E+00
FAETP	kg DCB eq.	1,84E-01	4,93E-03	1,02E-02	1,99E-01	9,66E-04	3,30E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,48E-04	1,90E-02	0,00E+00	0,00E+00
MAETP	kg DCB eq.	3,39E+02	1,33E+01	3,47E+01	3,87E+02	2,62E+00	6,59E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,33E+00	4,72E+01	0,00E+00	0,00E+00
TETP	kg DCB eq.	1,28E-02	6,62E-04	2,16E-02	3,50E-02	1,30E-04	5,39E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,85E-05	6,56E-04	0,00E+00	0,00E+00
ECI	euro	1,57E+00	4,84E-02	1,55E-01	1,78E+00	9,49E-03	3,17E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,36E-03	3,22E-01	0,00E+00	0,00E+00
ADPF	kg Sb eq.	8,36E-02	4,07E-03	1,27E-02	1,00E-01	7,98E-04	1,54E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,88E-04	1,35E-03	0,00E+00	0,00E+00

ADPE = Abiotic Depletion Potential for non-fossil resources
ADPF = Abiotic Depletion Potential for fossil resources
GWP = Global Warming Potential
ODP = Depletion potential of the stratospheric ozone layer
POCP = Formation potential of tropospheric ozone photochemical oxidants
AP = Acidification Potential of land and water
EP = Eutrophication Potential
HTP = Human Toxicity Potential
FAETP = Fresh water aquatic ecotoxicity potential
MAETP = Marine aquatic ecotoxicity potential
TETP = Terrestrial ecotoxicity potential
ECI = Environmental Cost Indicator
ADPF = Abiotic Depletion Potential for fossil resources

MULCOL
FIRE PROTECTION

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.	1,08E+01	5,50E-01	1,49E+00	1,28E+01	1,08E-01	3,08E+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	5,32E-02	7,54E+00	0,00E+00	0,00E+00
GWP-fossil	kg CO2 eq.	1,09E+01	5,49E-01	1,48E+00	1,29E+01	1,08E-01	2,03E+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	5,32E-02	4,74E-01	0,00E+00	0,00E+00
GWP-biogenic	kg CO2 eq.	-5,69E-02	2,65E-04	2,02E-03	-5,46E-02	5,19E-05	1,05E+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	2,46E-05	7,07E+00	0,00E+00	0,00E+00
GWP-luluc	kg CO2 eq.	5,77E-03	1,37E-04	4,16E-04	6,32E-03	2,69E-05	9,76E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,95E-05	1,42E-04	0,00E+00	0,00E+00
ODP	kg CFC11 eq.	6,40E-07	1,30E-07	1,47E-07	9,17E-07	2,54E-08	1,47E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,17E-08	2,84E-08	0,00E+00	0,00E+00
AP	mol H+ eq.	9,11E-02	1,77E-03	4,12E-03	9,70E-02	3,46E-04	1,49E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,08E-04	1,42E-03	0,00E+00	0,00E+00
EP-fresh water	kg P eq.	3,84E-04	3,83E-06	4,46E-05	4,33E-04	7,50E-07	7,15E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,37E-07	4,25E-05	0,00E+00	0,00E+00
EP-marine	kg N eq.	9,43E-03	4,06E-04	7,79E-04	1,06E-02	7,95E-05	3,12E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,09E-04	1,00E-02	0,00E+00	0,00E+00
EP-terrestrial	mol N eq.	1,50E-01	4,57E-03	8,88E-03	1,63E-01	8,95E-04	2,54E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,20E-03	3,85E-03	0,00E+00	0,00E+00
POCP	kg NMVOC eq.	4,59E-02	1,71E-03	2,63E-03	5,03E-02	3,35E-04	8,06E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,42E-04	2,77E-03	0,00E+00	0,00E+00
ADP-minerals & metals	kg Sb eq.	2,40E-04	9,36E-06	1,83E-05	2,68E-04	1,84E-06	4,08E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,35E-06	1,18E-06	0,00E+00	0,00E+00
ADP-fossil	MJ, net calorific value	1,50E+02	8,54E+00	2,41E+01	1,83E+02	1,67E+00	2,82E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,02E-01	2,68E+00	0,00E+00	0,00E+00
WDP	m3 world eq. Deprived	3,67E+00	3,63E-02	2,51E-01	3,96E+00	7,11E-03	6,09E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,87E-03	9,33E-02	0,00E+00	0,00E+00

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
EP-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 with the indicator.

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 inci-dence	5,30E-07	3,81E-08	2,45E-08	5,92E-07	7,47E-09	9,32E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,78E-09	1,65E-08	0,00E+00	0,00E+00
IRP	kBq U235 eq.	2,30E-01	3,67E-02	4,40E-02	3,11E-01	7,19E-03	4,99E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,36E-03	1,07E-02	0,00E+00	0,00E+00
ETP-fw	CTUe	2,36E+02	6,23E+00	2,45E+01	2,66E+02	1,22E+00	4,63E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,15E-01	4,04E+01	0,00E+00	0,00E+00
HTP-c	CTUh	3,27E-08	1,58E-10	1,90E-09	3,48E-08	3,09E-11	5,26E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,32E-11	2,52E-10	0,00E+00	0,00E+00
HTP-nc	CTUh	1,51E-07	5,03E-09	4,75E-08	2,04E-07	9,85E-10	3,26E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	7,82E-10	1,22E-08	0,00E+00	0,00E+00
SQP	-	5,11E+01	9,76E+00	2,04E+00	6,29E+01	1,91E+00	1,06E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,96E-01	4,81E+00	0,00E+00	0,00E+00

PM = Potential incidence of disease due to PM 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 unit or declared unit (A1 en A2)

	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	1,16E-04	2,11E-05	5,21E-05	1,89E-04	4,14E-06	3,06E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,03E-06	8,90E-06	0,00E+00	0,00E+00
NHWD	kg	1,17E+00	7,42E-01	1,00E-01	2,02E+00	1,46E-01	1,52E+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	5,09E-02	7,91E+00	0,00E+00	0,00E+00
RWD	kg	2,26E-04	5,80E-05	4,07E-05	3,25E-04	1,14E-05	5,33E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,27E-06	1,39E-05	0,00E+00	0,00E+00
CRU	kg	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	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
MFR	kg	0,00E+00	0,00E+00	1,43E-03	1,43E-03	0,00E+00	2,15E-04	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	0,00E+00	0,00E+00	0,00E+00
MER	kg	0,00E+00	0,00E+00	7,72E-05	7,72E-05	0,00E+00	1,16E-05	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	0,00E+00	0,00E+00	0,00E+00
EEE	MJ	0,00E+00	0,00E+00	5,23E-03	5,23E-03	0,00E+00	7,84E-04	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	0,00E+00	0,00E+00	0,00E+00
ETE	MJ	0,00E+00	0,00E+00	9,01E-03	9,01E-03	0,00E+00	1,35E-03	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	0,00E+00	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

MULCOL
FIRE PROTECTION

RESOURCE USE per functional unit 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	0,00E+00	0,00E+00	6,49E-02	6,49E-02	0,00E+00	9,73E-03	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	0,00E+00	0,00E+00	0,00E+00
PERM	MJ	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	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
PERT	MJ	7,20E+00	8,75E-02	4,67E-01	7,75E+00	1,72E-02	1,18E+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	1,00E-02	1,16E-01	0,00E+00	0,00E+00
PENRE	MJ	0,00E+00	0,00E+00	2,21E+01	2,21E+01	0,00E+00	3,31E+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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRM	MJ	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	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
PENRT	MJ	1,61E+02	9,07E+00	2,63E+01	1,96E+02	1,78E+00	3,02E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,52E-01	2,85E+00	0,00E+00	0,00E+00
SM	kg	0,00E+00	0,00E+00	4,38E-04	4,38E-04	0,00E+00	6,57E-05	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	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	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	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
NSRF	MJ	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	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
FW	m3	9,72E-02	1,09E-03	8,49E-03	1,07E-01	2,14E-04	1,64E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,77E-05	2,47E-03	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
NSRF = Use of non-renewable secondary fuels
FW = Use of net fresh water

CALCULATION RULES

Energy and resource usage of the production facilities have been mass allocated based on data from 2023. A full calendar year of production data was used.

The resulting averages were calculated by aggregating the total energy and resource usage over the year and dividing by the number of production units or time periods. Capital goods, such as factory infrastructure, were excluded from this analysis to focus on operational energy and resource usage.

Primary data was collected from Mulcol International, covering production inputs, electricity use, welding operations, transport, and end-of-life scenarios. Background data was sourced from the Ecoinvent 3.6 database. Data quality is considered “good” to “very good” for all records in terms of time, geography, and technology representativeness, as assessed per EN 15804+A2 Annex E.

SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

Multimastic C is sprayed on the stone wool plates and dryed (A1-A3). Then they are packed and shipped to the customer (A4). Installation loss percentages (A5) are according to the NMD Asessment Method. After their usefull life they are shipped (C2) to waste processing to fully go into landfill (C2-C4). The transport distance to waste treatment is also calculated according to the NMD Assessment Method.

Electricity Mix – Global Warming Potential (GWP):
The NMD profile 0510-pro&Elektriciteitsverbruik, bouwmachine elektrisch, Grijze mix, per kWh input (electricity: 3.6 MJ/kWh; 3.6 MJ input equals 2.75 MJ output) was applied. This grey electricity mix is composed of the following energy sources: natural gas (81.25%), coal (10.93%), nuclear energy (4.42%), oil products (1.51%), and other non-renewable fuels (approximately 1.89%). The Global Warming Potential associated with this electricity mix is 6.23×10^{-1} kg CO_2-equivalent per kWh.

DECLARATION OF SVHC

Analysis show no SVHC present in the product.

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