

Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.80



Product: 3025426 - Gutter Stopend Sand 16
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - SGS Search



This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - PL -Buk - Extra products (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑
Product stage					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												D Reuse- Recovery- Recycling- potential				

Environmental impacts and parameters

GWP-total = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.06E-2	1.62E-3	1.45E-4	7.24E-2	9.75E-4	7.38E-2	3.02E-4	-4.76E-2	9.99E-2
GWP-f	kg CO2 eq	1.03E-1	1.62E-3	1.46E-4	1.05E-1	9.74E-4	3.78E-2	3.02E-4	-5.35E-2	9.04E-2
GWP-b	kg CO2 eq	-3.26E-2	9.84E-7	-1.54E-6	-3.26E-2	5.91E-7	3.60E-2	3.68E-7	6.02E-3	9.51E-3
GWP-luluc	kg CO2 eq	1.33E-4	5.73E-7	1.49E-7	1.34E-4	3.45E-7	1.17E-5	8.51E-9	-8.55E-5	6.01E-5
ODP	kg CFC11 eq	3.97E-8	3.73E-10	8.26E-12	4.01E-8	2.24E-10	3.19E-9	1.14E-11	-2.15E-8	2.20E-8
AP	mol H+ eq	5.91E-4	9.23E-6	1.47E-6	6.02E-4	5.55E-6	5.89E-5	2.78E-7	-2.13E-4	4.53E-4
EP-fw	kg P eq	4.74E-6	1.33E-8	8.24E-9	4.76E-6	8.01E-9	3.90E-7	3.75E-10	-2.22E-6	2.93E-6
EP-m	kg N eq	9.73E-5	3.30E-6	1.55E-7	1.01E-4	1.99E-6	1.52E-5	1.64E-7	-4.22E-5	7.58E-5
EP-T	mol N eq	1.06E-3	3.64E-5	1.85E-6	1.09E-3	2.19E-5	1.68E-4	1.10E-6	-4.65E-4	8.20E-4
POCP	kg NMVOC eq	3.53E-4	1.04E-5	6.28E-7	3.64E-4	6.25E-6	5.01E-5	3.79E-7	-1.55E-4	2.65E-4
ADP-mm	kg Sb eq	9.88E-5	4.19E-8	1.97E-8	9.88E-5	2.52E-8	2.28E-7	2.83E-10	-9.28E-7	9.81E-5
ADP-f	MJ	2.34E+0	2.49E-2	1.36E-3	2.37E+0	1.50E-2	1.56E-1	8.30E-4	-1.20E+0	1.34E+0
WDP	m3 depriv.	1.34E-1	7.63E-5	5.22E-5	1.34E-1	4.59E-5	5.73E-3	7.59E-6	-6.76E-2	7.26E-2
PM	disease inc.	4.36E-9	1.46E-10	9.08E-12	4.52E-9	8.79E-11	7.46E-10	5.70E-12	-2.15E-9	3.20E-9
IR	kBq U-235 eq	5.15E-3	1.09E-4	1.02E-6	5.26E-3	6.53E-5	5.53E-4	3.77E-6	-2.47E-3	3.41E-3
ETP-fw	CTUe	3.40E+0	2.02E-2	1.21E-2	3.43E+0	1.21E-2	1.09E+0	1.19E-2	-1.16E+0	3.38E+0
HTP-c	CTUh	1.09E-10	7.19E-13	6.17E-13	1.10E-10	4.32E-13	2.04E-11	2.41E-14	-3.69E-11	9.42E-11
HTP-nc	CTUh	2.71E-9	2.41E-11	1.57E-11	2.75E-9	1.45E-11	4.12E-10	2.32E-12	-9.54E-10	2.22E-9
SQP	Pt	3.40E+0	2.13E-2	2.24E-3	3.43E+0	1.28E-2	9.84E-2	2.11E-3	-3.57E+0	-3.03E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.98E-1	3.57E-4	2.40E-2	8.23E-1	2.14E-4	1.07E-2	2.91E-5	-5.97E-1	2.37E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.98E-1	3.57E-4	2.40E-2	8.23E-1	2.14E-4	1.07E-2	2.91E-5	-5.97E-1	2.37E-1
PENRE	MJ	2.51E+0	2.64E-2	1.44E-3	2.54E+0	1.59E-2	1.66E-1	8.81E-4	-1.30E+0	1.43E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.51E+0	2.64E-2	1.44E-3	2.54E+0	1.59E-2	1.66E-1	8.81E-4	-1.30E+0	1.43E+0
PET	MJ	3.31E+0	2.68E-2	2.55E-2	3.37E+0	1.61E-2	1.77E-1	9.10E-4	-1.89E+0	1.67E+0
SM	kg	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	1.84E-3	2.81E-6	1.46E-6	1.84E-3	1.69E-6	1.60E-4	1.00E-6	-8.77E-4	1.13E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.41E-5	6.36E-8	2.73E-13	1.42E-5	3.82E-8	2.64E-7	1.03E-9	-1.18E-6	1.33E-5
NHWD	kg	1.53E-2	1.54E-3	1.05E-6	1.69E-2	9.27E-4	6.37E-3	3.70E-3	-4.87E-3	2.30E-2
RWD	kg	4.65E-6	1.69E-7	1.10E-13	4.82E-6	1.02E-7	6.11E-7	5.37E-9	-2.29E-6	3.25E-6
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



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