

Environmental Profile

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

Ecochain v3.5.80



Product: 3071757 - PP DrainCham. StraigthBase OR 200x200 FI
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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.54E+0	5.66E-3	1.45E-4	5.54E+0	9.04E-2	6.99E+0	4.39E-2	-4.72E+0	7.94E+0
GWP-f	kg CO2 eq	8.87E+0	5.65E-3	1.46E-4	8.87E+0	9.04E-2	3.47E+0	4.39E-2	-5.06E+0	7.42E+0
GWP-b	kg CO2 eq	-3.33E+0	3.43E-6	-1.54E-6	-3.33E+0	5.49E-5	3.52E+0	3.86E-5	3.38E-1	5.27E-1
GWP-luluc	kg CO2 eq	6.53E-3	2.00E-6	1.49E-7	6.53E-3	3.20E-5	5.13E-4	7.49E-7	-4.84E-3	2.24E-3
ODP	kg CFC11 eq	4.51E-7	1.30E-9	8.26E-12	4.52E-7	2.08E-8	7.44E-8	1.11E-9	-2.83E-7	2.66E-7
AP	mol H+ eq	3.57E-2	3.22E-5	1.47E-6	3.57E-2	5.15E-4	3.13E-3	2.64E-5	-1.63E-2	2.31E-2
EP-fw	kg P eq	1.85E-4	4.65E-8	8.24E-9	1.85E-4	7.44E-7	1.50E-5	3.44E-8	-9.74E-5	1.04E-4
EP-m	kg N eq	6.56E-3	1.15E-5	1.55E-7	6.57E-3	1.84E-4	9.50E-4	1.97E-5	-3.29E-3	4.43E-3
EP-T	mol N eq	7.29E-2	1.27E-4	1.85E-6	7.30E-2	2.03E-3	1.05E-2	1.07E-4	-3.73E-2	4.84E-2
POCP	kg NMVOC eq	3.09E-2	3.63E-5	6.28E-7	3.10E-2	5.80E-4	3.24E-3	4.02E-5	-1.51E-2	1.97E-2
ADP-mm	kg Sb eq	3.94E-4	1.46E-7	1.97E-8	3.94E-4	2.34E-6	1.19E-5	2.66E-8	-4.58E-5	3.62E-4
ADP-f	MJ	2.82E+2	8.68E-2	1.36E-3	2.82E+2	1.39E+0	9.24E+0	8.08E-2	-1.45E+2	1.48E+2
WDP	m3 depriv.	5.60E+0	2.66E-4	5.22E-5	5.60E+0	4.26E-3	1.80E-1	3.88E-4	-2.88E+0	2.91E+0
PM	disease inc.	3.79E-7	5.10E-10	9.08E-12	3.80E-7	8.16E-9	4.94E-8	5.55E-10	-1.90E-7	2.48E-7
IR	kBq U-235 eq	2.38E-1	3.79E-4	1.02E-6	2.38E-1	6.06E-3	2.87E-2	3.76E-4	-1.07E-1	1.67E-1
ETP-fw	CTUe	1.26E+2	7.05E-2	1.21E-2	1.26E+2	1.13E+0	1.17E+1	7.50E-2	-5.65E+1	8.27E+1
HTP-c	CTUh	4.29E-9	2.51E-12	6.17E-13	4.29E-9	4.01E-11	1.29E-9	1.97E-12	-2.10E-9	3.52E-9
HTP-nc	CTUh	8.65E-8	8.40E-11	1.57E-11	8.66E-8	1.34E-9	1.59E-8	4.53E-11	-3.69E-8	6.70E-8
SQP	Pt	3.13E+2	7.43E-2	2.24E-3	3.13E+2	1.19E+0	7.26E+0	2.07E-1	-2.98E+2	2.38E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.34E+1	1.25E-3	2.40E-2	7.35E+1	1.99E-2	4.44E-1	3.18E-3	-4.78E+1	2.61E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.34E+1	1.25E-3	2.40E-2	7.35E+1	1.99E-2	4.44E-1	3.18E-3	-4.78E+1	2.61E+1
PENRE	MJ	3.03E+2	9.22E-2	1.44E-3	3.03E+2	1.47E+0	9.85E+0	8.57E-2	-1.56E+2	1.58E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.03E+2	9.22E-2	1.44E-3	3.03E+2	1.47E+0	9.85E+0	8.57E-2	-1.56E+2	1.58E+2
PET	MJ	3.76E+2	9.34E-2	2.55E-2	3.76E+2	1.49E+0	1.03E+1	8.89E-2	-2.04E+2	1.84E+2
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	9.61E-2	9.82E-6	1.46E-6	9.61E-2	1.57E-4	6.09E-3	9.98E-5	-5.08E-2	5.16E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.61E-5	2.22E-7	2.73E-13	7.63E-5	3.55E-6	1.60E-5	9.72E-8	-6.00E-5	3.60E-5
NHWD	kg	5.88E-1	5.38E-3	1.05E-6	5.93E-1	8.60E-2	4.75E-1	3.56E-1	-2.59E-1	1.25E+0
RWD	kg	2.50E-4	5.90E-7	1.10E-13	2.51E-4	9.43E-6	3.69E-5	5.28E-7	-1.05E-4	1.93E-4
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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