

Environmental Profile

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

Ecochain v3.5.64



Product: 3067730 - SiTech+ Bend STB 45° 125
Unit: 1 piece
Manufacturer: Wavin - IT - SM Maddalena

Wavin SiTech+ is a waste water system made of mineral- reinforced polypropylene (PP), which offers increased durability, but more importantly is quiet and easy to install.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 24-11-2022
End of validity: 24-11-2027
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 - IT - SM Maddalena (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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.11E+0	1.63E-2	8.03E-2	1.20E+0	1.45E-2	6.11E-1	6.96E-3	-6.79E-1	1.16E+0
GWP-f	kg CO2 eq	1.21E+0	1.63E-2	6.87E-2	1.29E+0	1.45E-2	4.89E-1	6.96E-3	-7.22E-1	1.08E+0
GWP-b	kg CO2 eq	-9.88E-2	9.89E-6	5.80E-3	-9.30E-2	8.78E-6	1.22E-1	6.12E-6	4.32E-2	7.26E-2
GWP-luluc	kg CO2 eq	6.38E-4	5.76E-6	5.80E-3	6.44E-3	5.12E-6	8.11E-5	1.18E-7	-4.94E-4	6.04E-3
ODP	kg CFC11 eq	4.36E-8	3.75E-9	6.89E-9	5.42E-8	3.33E-9	1.12E-8	1.75E-10	-3.27E-8	3.63E-8
AP	mol H+ eq	4.53E-3	9.28E-5	2.77E-4	4.90E-3	8.24E-5	4.70E-4	4.18E-6	-2.17E-3	3.28E-3
EP-fw	kg P eq	2.15E-5	1.34E-7	1.07E-6	2.27E-5	1.19E-7	2.36E-6	5.41E-9	-1.19E-5	1.33E-5
EP-m	kg N eq	7.99E-4	3.32E-5	4.68E-5	8.79E-4	2.95E-5	1.40E-4	3.01E-6	-4.07E-4	6.45E-4
EP-T	mol N eq	8.88E-3	3.66E-4	5.26E-4	9.78E-3	3.25E-4	1.54E-3	1.70E-5	-4.54E-3	7.11E-3
POCP	kg NMVOC eq	3.93E-3	1.05E-4	1.63E-4	4.20E-3	9.28E-5	4.81E-4	6.36E-6	-1.94E-3	2.84E-3
ADP-mm	kg Sb eq	4.47E-5	4.21E-7	1.67E-6	4.68E-5	3.74E-7	1.83E-6	4.19E-9	-5.85E-6	4.31E-5
ADP-f	MJ	4.16E+1	2.50E-1	9.04E-1	4.28E+1	2.22E-1	1.44E+0	1.28E-2	-2.18E+1	2.26E+1
WDP	m3 depriv.	8.21E-1	7.67E-4	3.20E-1	1.14E+0	6.81E-4	2.83E-2	5.85E-5	-4.28E-1	7.42E-1
PM	disease inc.	4.39E-8	1.47E-9	2.78E-9	4.81E-8	1.31E-9	7.58E-9	8.79E-11	-2.17E-8	3.54E-8
IR	kBq U-235 eq	2.87E-2	1.09E-3	8.43E-4	3.06E-2	9.70E-4	4.40E-3	5.95E-5	-1.34E-2	2.27E-2
ETP-fw	CTUe	1.30E+1	2.03E-1	1.43E+0	1.46E+1	1.80E-1	1.76E+0	1.15E-2	-6.46E+0	1.01E+1
HTP-c	CTUh	3.46E-10	7.22E-12	7.61E-11	4.29E-10	6.41E-12	1.93E-10	3.10E-13	-1.75E-10	4.53E-10
HTP-nc	CTUh	8.61E-9	2.42E-10	1.58E-9	1.04E-8	2.15E-10	2.44E-9	7.06E-12	-4.35E-9	8.74E-9
SQP	Pt	1.22E+1	2.14E-1	1.65E-1	1.26E+1	1.90E-1	1.13E+0	3.28E-2	-1.60E+1	-2.03E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.25E+0	3.59E-3	3.13E+0	5.38E+0	3.18E-3	6.99E-2	5.03E-4	-2.82E+0	2.64E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.25E+0	3.59E-3	3.13E+0	5.38E+0	3.18E-3	6.99E-2	5.03E-4	-2.82E+0	2.64E+0
PENRE	MJ	4.46E+1	2.65E-1	9.86E-1	4.59E+1	2.36E-1	1.53E+0	1.36E-2	-2.35E+1	2.42E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.46E+1	2.65E-1	9.86E-1	4.59E+1	2.36E-1	1.53E+0	1.36E-2	-2.35E+1	2.42E+1
PET	MJ	4.69E+1	2.69E-1	4.11E+0	5.13E+1	2.39E-1	1.60E+0	1.41E-2	-2.63E+1	2.68E+1
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	1.31E-2	2.83E-5	7.60E-3	2.08E-2	2.51E-5	9.11E-4	1.58E-5	-7.23E-3	1.45E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.21E-6	6.39E-7	8.79E-7	8.73E-6	5.68E-7	2.43E-6	1.53E-8	-6.49E-6	5.25E-6
NHWD	kg	6.02E-2	1.55E-2	8.56E-3	8.42E-2	1.38E-2	7.14E-2	5.64E-2	-2.38E-2	2.02E-1
RWD	kg	2.86E-5	1.70E-6	9.38E-7	3.13E-5	1.51E-6	5.61E-6	8.36E-8	-1.26E-5	2.59E-5
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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