

Environmental Profile

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

Ecochain v3.5.64



Product: 3067750 - SiTech+ Branch Reduced STEA 45° 50X40
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	2.39E-1	5.65E-3	1.55E-2	2.60E-1	2.92E-3	1.55E-1	1.44E-3	-1.36E-1	2.84E-1
GWP-f	kg CO2 eq	2.68E-1	5.65E-3	1.32E-2	2.87E-1	2.91E-3	1.16E-1	1.44E-3	-1.56E-1	2.51E-1
GWP-b	kg CO2 eq	-2.88E-2	3.43E-6	1.12E-3	-2.77E-2	1.77E-6	3.85E-2	1.28E-6	2.06E-2	3.14E-2
GWP-luluc	kg CO2 eq	2.14E-4	2.00E-6	1.12E-3	1.33E-3	1.03E-6	1.63E-5	2.45E-8	-1.86E-4	1.16E-3
ODP	kg CFC11 eq	1.51E-8	1.30E-9	1.33E-9	1.77E-8	6.71E-10	2.41E-9	3.64E-11	-8.35E-9	1.25E-8
AP	mol H+ eq	1.07E-3	3.22E-5	5.34E-5	1.15E-3	1.66E-5	1.01E-4	8.71E-7	-4.97E-4	7.77E-4
EP-fw	kg P eq	5.71E-6	4.65E-8	2.05E-7	5.96E-6	2.40E-8	4.79E-7	1.13E-9	-3.46E-6	3.01E-6
EP-m	kg N eq	1.97E-4	1.15E-5	9.01E-6	2.18E-4	5.94E-6	3.07E-5	6.95E-7	-9.68E-5	1.58E-4
EP-T	mol N eq	2.17E-3	1.27E-4	1.01E-4	2.39E-3	6.54E-5	3.38E-4	3.53E-6	-1.09E-3	1.71E-3
POCP	kg NMVOC eq	9.14E-4	3.63E-5	3.15E-5	9.82E-4	1.87E-5	1.05E-4	1.32E-6	-4.33E-4	6.74E-4
ADP-mm	kg Sb eq	1.69E-5	1.46E-7	3.22E-7	1.73E-5	7.54E-8	3.88E-7	8.72E-10	-1.51E-6	1.63E-5
ADP-f	MJ	8.87E+0	8.67E-2	1.74E-1	9.13E+0	4.47E-2	2.95E-1	2.66E-3	-4.52E+0	4.95E+0
WDP	m3 depriv.	1.77E-1	2.66E-4	6.16E-2	2.39E-1	1.37E-4	5.85E-3	1.22E-5	-1.02E-1	1.43E-1
PM	disease inc.	1.11E-8	5.10E-10	5.34E-10	1.22E-8	2.63E-10	1.59E-9	1.83E-11	-5.59E-9	8.44E-9
IR	kBq U-235 eq	8.01E-3	3.79E-4	1.62E-4	8.55E-3	1.95E-4	9.18E-4	1.24E-5	-3.52E-3	6.15E-3
ETP-fw	CTUe	4.53E+0	7.04E-2	2.75E-1	4.87E+0	3.63E-2	4.00E-1	2.61E-3	-2.23E+0	3.08E+0
HTP-c	CTUh	8.82E-11	2.50E-12	1.46E-11	1.05E-10	1.29E-12	3.96E-11	6.48E-14	-4.54E-11	1.01E-10
HTP-nc	CTUh	2.14E-9	8.39E-11	3.04E-10	2.53E-9	4.33E-11	5.10E-10	1.52E-12	-1.13E-9	1.95E-9
SQP	Pt	3.77E+0	7.42E-2	3.17E-2	3.87E+0	3.83E-2	2.29E-1	6.82E-3	-5.95E+0	-1.80E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.77E-1	1.24E-3	6.02E-1	1.28E+0	6.41E-4	1.42E-2	1.06E-4	-1.04E+0	2.51E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.77E-1	1.24E-3	6.02E-1	1.28E+0	6.41E-4	1.42E-2	1.06E-4	-1.04E+0	2.51E-1
PENRE	MJ	9.51E+0	9.20E-2	1.90E-1	9.79E+0	4.75E-2	3.14E-1	2.82E-3	-4.87E+0	5.28E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.51E+0	9.20E-2	1.90E-1	9.79E+0	4.75E-2	3.14E-1	2.82E-3	-4.87E+0	5.28E+0
PET	MJ	1.02E+1	9.33E-2	7.92E-1	1.11E+1	4.81E-2	3.29E-1	2.93E-3	-5.91E+0	5.54E+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	3.06E-3	9.81E-6	1.46E-3	4.53E-3	5.06E-6	2.09E-4	3.29E-6	-1.89E-3	2.86E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.04E-6	2.22E-7	1.69E-7	2.43E-6	1.14E-7	5.22E-7	3.19E-9	-1.63E-6	1.44E-6
NHWD	kg	1.62E-2	5.37E-3	1.65E-3	2.32E-2	2.77E-3	1.49E-2	1.17E-2	-6.04E-3	4.66E-2
RWD	kg	8.65E-6	5.89E-7	1.81E-7	9.42E-6	3.04E-7	1.18E-6	1.74E-8	-3.36E-6	7.56E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777