

Environmental Profile

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

Ecochain v3.5.64



Product: 3067780 - SiTech+ Branch Reduced STEA 87,5°125X110
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	1.71E+0	2.91E-2	1.24E-1	1.86E+0	2.23E-2	9.95E-1	1.08E-2	-1.04E+0	1.84E+0
GWP-f	kg CO2 eq	1.89E+0	2.91E-2	1.06E-1	2.03E+0	2.23E-2	7.65E-1	1.08E-2	-1.13E+0	1.69E+0
GWP-b	kg CO2 eq	-1.85E-1	1.77E-5	8.93E-3	-1.76E-1	1.36E-5	2.30E-1	9.46E-6	8.75E-2	1.42E-1
GWP-luluc	kg CO2 eq	1.13E-3	1.03E-5	8.92E-3	1.01E-2	7.90E-6	1.26E-4	1.82E-7	-9.23E-4	9.27E-3
ODP	kg CFC11 eq	7.28E-8	6.70E-9	1.06E-8	9.01E-8	5.14E-9	1.76E-8	2.71E-10	-5.28E-8	6.03E-8
AP	mol H+ eq	7.17E-3	1.66E-4	4.26E-4	7.76E-3	1.27E-4	7.37E-4	6.46E-6	-3.48E-3	5.15E-3
EP-fw	kg P eq	3.50E-5	2.39E-7	1.64E-6	3.69E-5	1.84E-7	3.66E-6	8.38E-9	-2.03E-5	2.04E-5
EP-m	kg N eq	1.28E-3	5.93E-5	7.20E-5	1.42E-3	4.55E-5	2.20E-4	4.69E-6	-6.58E-4	1.03E-3
EP-T	mol N eq	1.42E-2	6.53E-4	8.09E-4	1.57E-2	5.01E-4	2.42E-3	2.63E-5	-7.37E-3	1.13E-2
POCP	kg NMVOC eq	6.22E-3	1.87E-4	2.51E-4	6.65E-3	1.43E-4	7.57E-4	9.84E-6	-3.09E-3	4.48E-3
ADP-mm	kg Sb eq	7.33E-5	7.52E-7	2.57E-6	7.66E-5	5.78E-7	2.88E-6	6.48E-9	-9.36E-6	7.07E-5
ADP-f	MJ	6.48E+1	4.46E-1	1.39E+0	6.66E+1	3.43E-1	2.24E+0	1.98E-2	-3.39E+1	3.53E+1
WDP	m3 depriv.	1.28E+0	1.37E-3	4.92E-1	1.77E+0	1.05E-3	4.39E-2	9.06E-5	-6.91E-1	1.13E+0
PM	disease inc.	7.06E-8	2.63E-9	4.27E-9	7.75E-8	2.02E-9	1.18E-8	1.36E-10	-3.60E-8	5.55E-8
IR	kBq U-235 eq	4.63E-2	1.95E-3	1.30E-3	4.95E-2	1.50E-3	6.87E-3	9.21E-5	-2.22E-2	3.58E-2
ETP-fw	CTUe	2.30E+1	3.63E-1	2.19E+0	2.55E+1	2.78E-1	2.77E+0	1.79E-2	-1.17E+1	1.69E+1
HTP-c	CTUh	5.63E-10	1.29E-11	1.17E-10	6.92E-10	9.90E-12	3.00E-10	4.79E-13	-2.94E-10	7.09E-10
HTP-nc	CTUh	1.38E-8	4.32E-10	2.43E-9	1.66E-8	3.32E-10	3.80E-9	1.10E-11	-7.21E-9	1.36E-8
SQP	Pt	2.24E+1	3.82E-1	2.53E-1	2.30E+1	2.93E-1	1.76E+0	5.08E-2	-3.06E+1	-5.48E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.05E+0	6.41E-3	4.81E+0	8.87E+0	4.92E-3	1.08E-1	7.79E-4	-5.37E+0	3.62E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.05E+0	6.41E-3	4.81E+0	8.87E+0	4.92E-3	1.08E-1	7.79E-4	-5.37E+0	3.62E+0
PENRE	MJ	6.95E+1	4.74E-1	1.52E+0	7.15E+1	3.64E-1	2.38E+0	2.10E-2	-3.66E+1	3.77E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.95E+1	4.74E-1	1.52E+0	7.15E+1	3.64E-1	2.38E+0	2.10E-2	-3.66E+1	3.77E+1
PET	MJ	7.35E+1	4.80E-1	6.33E+0	8.03E+1	3.69E-1	2.49E+0	2.18E-2	-4.19E+1	4.13E+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	2.07E-2	5.05E-5	1.17E-2	3.24E-2	3.88E-5	1.43E-3	2.44E-5	-1.20E-2	2.20E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.19E-5	1.14E-6	1.35E-6	1.44E-5	8.76E-7	3.80E-6	2.37E-8	-1.05E-5	8.57E-6
NHWD	kg	9.88E-2	2.77E-2	1.32E-2	1.40E-1	2.12E-2	1.11E-1	8.72E-2	-3.96E-2	3.20E-1
RWD	kg	4.66E-5	3.04E-6	1.44E-6	5.11E-5	2.33E-6	8.78E-6	1.29E-7	-2.09E-5	4.14E-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



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