

Environmental Profile

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

Ecochain v3.5.64



Product: 3067761 - SiTech+ Branch Reduced STEA 45° 125X75
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	1.49E+0	2.35E-2	1.09E-1	1.62E+0	1.96E-2	8.96E-1	9.45E-3	-9.15E-1	1.63E+0
GWP-f	kg CO2 eq	1.67E+0	2.35E-2	9.32E-2	1.79E+0	1.96E-2	6.66E-1	9.45E-3	-1.00E+0	1.48E+0
GWP-b	kg CO2 eq	-1.85E-1	1.43E-5	7.87E-3	-1.77E-1	1.19E-5	2.30E-1	8.30E-6	8.79E-2	1.41E-1
GWP-luluc	kg CO2 eq	1.06E-3	8.32E-6	7.87E-3	8.94E-3	6.95E-6	1.11E-4	1.59E-7	-8.99E-4	8.15E-3
ODP	kg CFC11 eq	6.36E-8	5.42E-9	9.35E-9	7.83E-8	4.52E-9	1.57E-8	2.38E-10	-4.72E-8	5.15E-8
AP	mol H+ eq	6.34E-3	1.34E-4	3.76E-4	6.85E-3	1.12E-4	6.54E-4	5.67E-6	-3.13E-3	4.49E-3
EP-fw	kg P eq	3.14E-5	1.93E-7	1.45E-6	3.30E-5	1.61E-7	3.24E-6	7.35E-9	-1.90E-5	1.74E-5
EP-m	kg N eq	1.15E-3	4.79E-5	6.35E-5	1.26E-3	4.00E-5	1.96E-4	4.08E-6	-5.96E-4	9.03E-4
EP-T	mol N eq	1.27E-2	5.28E-4	7.14E-4	1.39E-2	4.41E-4	2.15E-3	2.30E-5	-6.68E-3	9.86E-3
POCP	kg NMVOC eq	5.50E-3	1.51E-4	2.22E-4	5.87E-3	1.26E-4	6.73E-4	8.63E-6	-2.77E-3	3.91E-3
ADP-mm	kg Sb eq	6.11E-5	6.08E-7	2.27E-6	6.40E-5	5.08E-7	2.56E-6	5.69E-9	-8.25E-6	5.88E-5
ADP-f	MJ	5.70E+1	3.61E-1	1.23E+0	5.86E+1	3.01E-1	1.98E+0	1.73E-2	-3.00E+1	3.09E+1
WDP	m3 depriv.	1.13E+0	1.11E-3	4.34E-1	1.56E+0	9.24E-4	3.86E-2	7.94E-5	-6.25E-1	9.75E-1
PM	disease inc.	6.29E-8	2.12E-9	3.77E-9	6.87E-8	1.77E-9	1.05E-8	1.19E-10	-3.31E-8	4.80E-8
IR	kBq U-235 eq	4.06E-2	1.58E-3	1.14E-3	4.33E-2	1.32E-3	6.10E-3	8.08E-5	-2.03E-2	3.05E-2
ETP-fw	CTUe	2.15E+1	2.93E-1	1.94E+0	2.37E+1	2.45E-1	2.45E+0	1.56E-2	-1.12E+1	1.52E+1
HTP-c	CTUh	5.06E-10	1.04E-11	1.03E-10	6.20E-10	8.70E-12	2.66E-10	4.20E-13	-2.73E-10	6.22E-10
HTP-nc	CTUh	1.23E-8	3.49E-10	2.14E-9	1.47E-8	2.92E-10	3.36E-9	9.58E-12	-6.63E-9	1.18E-8
SQP	Pt	2.20E+1	3.09E-1	2.24E-1	2.25E+1	2.58E-1	1.56E+0	4.45E-2	-3.05E+1	-6.10E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.92E+0	5.18E-3	4.24E+0	8.17E+0	4.32E-3	9.58E-2	6.83E-4	-5.32E+0	2.96E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.92E+0	5.18E-3	4.24E+0	8.17E+0	4.32E-3	9.58E-2	6.83E-4	-5.32E+0	2.96E+0
PENRE	MJ	6.11E+1	3.83E-1	1.34E+0	6.29E+1	3.20E-1	2.11E+0	1.84E-2	-3.23E+1	3.30E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.11E+1	3.83E-1	1.34E+0	6.29E+1	3.20E-1	2.11E+0	1.84E-2	-3.23E+1	3.30E+1
PET	MJ	6.51E+1	3.88E-1	5.58E+0	7.10E+1	3.24E-1	2.20E+0	1.91E-2	-3.76E+1	3.60E+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	1.82E-2	4.08E-5	1.03E-2	2.86E-2	3.41E-5	1.25E-3	2.14E-5	-1.10E-2	1.89E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.07E-5	9.23E-7	1.19E-6	1.28E-5	7.70E-7	3.37E-6	2.08E-8	-9.45E-6	7.50E-6
NHWD	kg	8.90E-2	2.24E-2	1.16E-2	1.23E-1	1.87E-2	9.83E-2	7.65E-2	-3.66E-2	2.80E-1
RWD	kg	4.06E-5	2.45E-6	1.27E-6	4.44E-5	2.05E-6	7.80E-6	1.13E-7	-1.91E-5	3.52E-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