

Environmental Profile

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

Ecochain v3.5.64



Product: 3067790 - SiTech+ Coupler STU 40
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	1.19E-1	3.61E-3	6.60E-3	1.30E-1	1.32E-3	8.66E-2	6.83E-4	-6.39E-2	1.54E-1
GWP-f	kg CO2 eq	1.34E-1	3.61E-3	5.65E-3	1.43E-1	1.32E-3	6.70E-2	6.83E-4	-7.49E-2	1.38E-1
GWP-b	kg CO2 eq	-1.47E-2	2.19E-6	4.77E-4	-1.43E-2	8.02E-7	1.96E-2	6.14E-7	1.11E-2	1.64E-2
GWP-luluc	kg CO2 eq	1.19E-4	1.28E-6	4.77E-4	5.97E-4	4.67E-7	7.10E-6	1.18E-8	-9.67E-5	5.08E-4
ODP	kg CFC11 eq	1.10E-8	8.32E-10	5.67E-10	1.24E-8	3.04E-10	1.10E-9	1.74E-11	-4.57E-9	9.28E-9
AP	mol H+ eq	5.70E-4	2.06E-5	2.28E-5	6.14E-4	7.52E-6	4.68E-5	4.19E-7	-2.31E-4	4.38E-4
EP-fw	kg P eq	3.19E-6	2.97E-8	8.78E-8	3.31E-6	1.09E-8	2.11E-7	5.45E-10	-1.71E-6	1.82E-6
EP-m	kg N eq	1.04E-4	7.35E-6	3.85E-6	1.16E-4	2.69E-6	1.45E-5	3.89E-7	-4.60E-5	8.71E-5
EP-T	mol N eq	1.15E-3	8.10E-5	4.33E-5	1.27E-3	2.97E-5	1.60E-4	1.69E-6	-5.18E-4	9.44E-4
POCP	kg NMVOC eq	4.81E-4	2.32E-5	1.34E-5	5.18E-4	8.48E-6	4.87E-5	6.32E-7	-2.01E-4	3.75E-4
ADP-mm	kg Sb eq	1.41E-5	9.33E-8	1.38E-7	1.43E-5	3.42E-8	1.73E-7	4.18E-10	-8.88E-7	1.36E-5
ADP-f	MJ	4.30E+0	5.54E-2	7.44E-2	4.43E+0	2.03E-2	1.31E-1	1.27E-3	-2.07E+0	2.52E+0
WDP	m3 depriv.	8.72E-2	1.70E-4	2.63E-2	1.14E-1	6.22E-5	2.72E-3	5.84E-6	-4.71E-2	6.94E-2
PM	disease inc.	6.19E-9	3.26E-10	2.28E-10	6.75E-9	1.19E-10	7.08E-10	8.74E-12	-2.68E-9	4.90E-9
IR	kBq U-235 eq	5.08E-3	2.42E-4	6.94E-5	5.39E-3	8.86E-5	4.09E-4	5.97E-6	-1.74E-3	4.16E-3
ETP-fw	CTUe	2.61E+0	4.50E-2	1.17E-1	2.77E+0	1.65E-2	2.03E-1	1.42E-3	-1.15E+0	1.84E+0
HTP-c	CTUh	4.90E-11	1.60E-12	6.26E-12	5.68E-11	5.86E-13	1.74E-11	3.14E-14	-2.21E-11	5.28E-11
HTP-nc	CTUh	1.18E-9	5.36E-11	1.30E-10	1.36E-9	1.96E-11	2.33E-10	7.70E-13	-5.43E-10	1.07E-9
SQP	Pt	1.98E+0	4.74E-2	1.35E-2	2.04E+0	1.73E-2	1.00E-1	3.27E-3	-3.10E+0	-9.39E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.54E-1	7.95E-4	2.57E-1	6.12E-1	2.91E-4	6.24E-3	5.17E-5	-5.43E-1	7.54E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.54E-1	7.95E-4	2.57E-1	6.12E-1	2.91E-4	6.24E-3	5.17E-5	-5.43E-1	7.54E-2
PENRE	MJ	4.61E+0	5.88E-2	8.11E-2	4.75E+0	2.15E-2	1.39E-1	1.35E-3	-2.23E+0	2.68E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.61E+0	5.88E-2	8.11E-2	4.75E+0	2.15E-2	1.39E-1	1.35E-3	-2.23E+0	2.68E+0
PET	MJ	4.96E+0	5.96E-2	3.38E-1	5.36E+0	2.18E-2	1.46E-1	1.40E-3	-2.77E+0	2.76E+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	1.62E-3	6.27E-6	6.25E-4	2.25E-3	2.29E-6	1.12E-4	1.58E-6	-9.06E-4	1.46E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.22E-6	1.42E-7	7.23E-8	1.44E-6	5.18E-8	2.43E-7	1.53E-9	-8.75E-7	8.59E-7
NHWD	kg	9.12E-3	3.43E-3	7.04E-4	1.33E-2	1.26E-3	6.88E-3	5.61E-3	-2.91E-3	2.41E-2
RWD	kg	5.90E-6	3.77E-7	7.71E-8	6.36E-6	1.38E-7	5.26E-7	8.34E-9	-1.70E-6	5.33E-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



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