

Environmental Profile

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

Ecochain v3.5.64



Product: 3067809 - SiTech+ Double Length Socket STLL 110
 Unit: 1 piece
 Manufacturer: Wavin - IT - SM Maddalena

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



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.

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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

D Reuse- Recovery- Recycling- potential

Environmental impacts and parameters

GWP-total = EF Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.01E+0	1.84E-2	7.35E-2	1.10E+0	1.33E-2	5.62E-1	6.36E-3	-6.15E-1	1.07E+0
GWP-f	kg CO2 eq	1.11E+0	1.84E-2	6.29E-2	1.19E+0	1.33E-2	4.35E-1	6.36E-3	-6.69E-1	9.77E-1
GWP-b	kg CO2 eq	-9.86E-2	1.12E-5	5.31E-3	-9.33E-2	8.07E-6	1.27E-1	5.58E-6	5.43E-2	8.82E-2
GWP-luluc	kg CO2 eq	6.59E-4	6.50E-6	5.31E-3	5.97E-3	4.70E-6	7.53E-5	1.07E-7	-5.60E-4	5.49E-3
ODP	kg CFC11 eq	3.76E-8	4.23E-9	6.31E-9	4.81E-8	3.06E-9	1.05E-8	1.60E-10	-3.05E-8	3.14E-8
AP	mol H+ eq	4.15E-3	1.05E-4	2.54E-4	4.51E-3	7.57E-5	4.39E-4	3.81E-6	-2.08E-3	2.95E-3
EP-fw	kg P eq	2.02E-5	1.51E-7	9.77E-7	2.13E-5	1.09E-7	2.19E-6	4.94E-9	-1.23E-5	1.14E-5
EP-m	kg N eq	7.48E-4	3.74E-5	4.28E-5	8.29E-4	2.71E-5	1.31E-4	2.68E-6	-3.91E-4	5.98E-4
EP-T	mol N eq	8.27E-3	4.13E-4	4.81E-4	9.16E-3	2.98E-4	1.44E-3	1.55E-5	-4.38E-3	6.54E-3
POCP	kg NMVOC eq	3.61E-3	1.18E-4	1.49E-4	3.87E-3	8.53E-5	4.51E-4	5.81E-6	-1.84E-3	2.58E-3
ADP-mm	kg Sb eq	3.42E-5	4.75E-7	1.53E-6	3.62E-5	3.44E-7	1.72E-6	3.83E-9	-5.28E-6	3.29E-5
ADP-f	MJ	3.82E+1	2.82E-1	8.27E-1	3.93E+1	2.04E-1	1.34E+0	1.17E-2	-2.02E+1	2.06E+1
WDP	m3 depriv.	7.52E-1	8.65E-4	2.93E-1	1.05E+0	6.26E-4	2.60E-2	5.34E-5	-4.16E-1	6.56E-1
PM	disease inc.	4.05E-8	1.66E-9	2.54E-9	4.47E-8	1.20E-9	7.10E-9	8.02E-11	-2.15E-8	3.16E-8
IR	kBq U-235 eq	2.55E-2	1.23E-3	7.72E-4	2.75E-2	8.91E-4	4.12E-3	5.43E-5	-1.32E-2	1.94E-2
ETP-fw	CTUe	1.34E+1	2.29E-1	1.31E+0	1.50E+1	1.66E-1	1.63E+0	1.03E-2	-7.07E+0	9.68E+0
HTP-c	CTUh	3.20E-10	8.15E-12	6.96E-11	3.98E-10	5.89E-12	1.80E-10	2.82E-13	-1.72E-10	4.11E-10
HTP-nc	CTUh	7.94E-9	2.73E-10	1.44E-9	9.65E-9	1.97E-10	2.26E-9	6.40E-12	-4.31E-9	7.81E-9
SQP	Pt	1.24E+1	2.41E-1	1.51E-1	1.28E+1	1.74E-1	1.05E+0	3.00E-2	-1.79E+1	-3.84E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.28E+0	4.04E-3	2.86E+0	5.14E+0	2.93E-3	6.49E-2	4.58E-4	-3.16E+0	2.05E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.28E+0	4.04E-3	2.86E+0	5.14E+0	2.93E-3	6.49E-2	4.58E-4	-3.16E+0	2.05E+0
PENRE	MJ	4.09E+1	2.99E-1	9.02E-1	4.22E+1	2.17E-1	1.43E+0	1.24E-2	-2.18E+1	2.21E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.09E+1	2.99E-1	9.02E-1	4.22E+1	2.17E-1	1.43E+0	1.24E-2	-2.18E+1	2.21E+1
PET	MJ	4.32E+1	3.03E-1	3.76E+0	4.73E+1	2.19E-1	1.49E+0	1.28E-2	-2.49E+1	2.41E+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	1.20E-2	3.19E-5	6.95E-3	1.90E-2	2.31E-5	8.24E-4	1.44E-5	-7.21E-3	1.26E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.66E-6	7.21E-7	8.04E-7	8.19E-6	5.22E-7	2.26E-6	1.40E-8	-6.07E-6	4.91E-6
NHWD	kg	5.65E-2	1.75E-2	7.84E-3	8.18E-2	1.26E-2	6.62E-2	5.15E-2	-2.34E-2	1.89E-1
RWD	kg	2.49E-5	1.92E-6	8.58E-7	2.77E-5	1.39E-6	5.26E-6	7.63E-8	-1.24E-5	2.21E-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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