

Environmental Profile

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

Ecochain v3.5.64



Product: 3004474 - smartFIX Coupler 25
Unit: 1 Piece
Manufacturer: Wavin - DE - Twist - Handmade

The Wavin smartFIX system consists of the Tigris PEX/AL pipe, on a roll or in lengths, with push-fit fittings for installation work in tight spaces.

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 29-11-2022
End of validity: 29-11-2027
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 - DE - Twist - Handmade (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	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	Total
GWP-total	kg CO2 eq	3.17E-1	1.44E-3	1.05E-3	3.19E-1	3.19E-1
GWP-f	kg CO2 eq	3.59E-1	1.44E-3	7.73E-4	3.62E-1	3.62E-1
GWP-b	kg CO2 eq	-4.60E-2	8.73E-7	2.76E-4	-4.57E-2	-4.57E-2
GWP-luluc	kg CO2 eq	3.51E-3	5.09E-7	1.19E-6	3.51E-3	3.51E-3
ODP	kg CFC11 eq	7.44E-8	3.31E-10	1.18E-10	7.48E-8	7.48E-8
AP	mol H+ eq	1.95E-3	8.19E-6	6.41E-6	1.96E-3	1.96E-3
EP-fw	kg P eq	1.26E-5	1.18E-8	2.76E-8	1.26E-5	1.26E-5
EP-m	kg N eq	3.15E-4	2.93E-6	3.05E-6	3.21E-4	3.21E-4
EP-T	mol N eq	3.69E-3	3.23E-5	2.87E-5	3.76E-3	3.76E-3
POCP	kg NMVOC eq	1.49E-3	9.24E-6	7.99E-6	1.51E-3	1.51E-3
ADP-mm	kg Sb eq	1.91E-5	3.72E-8	5.71E-9	1.92E-5	1.92E-5
ADP-f	MJ	6.08E+0	2.21E-2	7.94E-3	6.11E+0	6.11E+0
WDP	m3 depriv.	4.15E-1	6.78E-5	1.04E-2	4.25E-1	4.25E-1
PM	disease inc.	1.73E-8	1.30E-10	1.67E-10	1.76E-8	1.76E-8
IR	kBq U-235 eq	1.09E-2	9.65E-5	3.86E-5	1.11E-2	1.11E-2
ETP-fw	CTUe	3.72E+1	1.79E-2	1.85E-2	3.72E+1	3.72E+1
HTP-c	CTUh	1.70E-9	6.38E-13	8.02E-13	1.70E-9	1.70E-9
HTP-nc	CTUh	8.40E-9	2.14E-11	1.37E-11	8.43E-9	8.43E-9
SQP	Pt	5.51E+0	1.89E-2	3.60E-3	5.54E+0	5.54E+0
Resource use	Unit	A1	A2	A3	A1-A3	Total
PERE	MJ	2.61E+0	3.17E-4	7.17E-4	2.61E+0	2.61E+0
PERM	MJ	0	0	0	0	0
PERT	MJ	2.61E+0	3.17E-4	7.17E-4	2.61E+0	2.61E+0
PENRE	MJ	6.54E+0	2.34E-2	8.33E-3	6.57E+0	6.57E+0
PENRM	MJ	0	0	0	0	0
PENRT	MJ	6.54E+0	2.34E-2	8.33E-3	6.57E+0	6.57E+0
PET	MJ	9.15E+0	2.38E-2	9.05E-3	9.18E+0	9.18E+0
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m3	1.02E-2	2.50E-6	2.42E-4	1.05E-2	1.05E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	Total
HWD	kg	6.58E-6	5.65E-8	2.40E-8	6.66E-6	6.66E-6
NHWD	kg	1.31E-1	1.37E-3	1.99E-4	1.33E-1	1.33E-1
RWD	kg	1.09E-5	1.50E-7	5.90E-8	1.11E-5	1.11E-5
CRU	kg	0	0	0	0	0
MFR	kg	0	0	0	0	0
MER	kg	0	0	0	0	0
EE	MJ	0	0	0	0	0
EET	MJ	0	0	0	0	0
EEE	MJ	0	0	0	0	0



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