

Environmental Profile

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

Ecochain v3.5.80



Product: 3003137 - Wadal PVC Bend 88° GY 110 S/S
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - SGS Search



With Wadal you opt for a tensile-resistant system whose connections cannot slide apart. There is a solution for every indoor drainage situation, thanks to the very extensive range of PVC adhesive fittings and pipes. KOMO certified.

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 - NL - Hardenberg - Verified (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 SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.09	0	0.01	0.1	0	0.03	0	-0.05	0.09
ADPE	kg Sb-eq	8.58E-4	3.01E-7	1.30E-6	8.60E-4	2.82E-7	2.56E-6	3.15E-9	-9.82E-6	8.53E-4
ADPF	kg Sb-eq	1.01E-2	8.67E-5	2.24E-4	1.04E-2	7.94E-5	8.84E-4	4.36E-6	-5.52E-3	5.81E-3
GWP	kg CO2-eq	8.43E-1	1.18E-2	4.25E-2	8.97E-1	1.08E-2	3.01E-1	2.97E-3	-4.74E-1	7.39E-1
ODP	kg CFC-11-eq	4.75E-7	2.09E-9	3.36E-9	4.81E-7	2.00E-9	3.71E-8	1.04E-10	-2.40E-7	2.80E-7
POCP	kg ethene-eq	4.82E-4	7.12E-6	1.85E-5	5.08E-4	6.49E-6	6.99E-5	7.70E-7	-2.46E-4	3.38E-4
AP	kg SO2-eq	3.38E-3	5.19E-5	1.83E-4	3.61E-3	4.65E-5	5.16E-4	2.35E-6	-1.62E-3	2.56E-3
EP	kg PO4 3--eq	4.36E-4	1.02E-5	2.35E-5	4.69E-4	9.29E-6	7.83E-5	9.25E-7	-2.20E-4	3.37E-4
HTP	kg 1,4-DB-eq	3.30E-1	4.97E-3	1.98E-2	3.54E-1	4.62E-3	1.34E-1	2.46E-4	-1.55E-1	3.39E-1
FAETP	kg 1,4-DB-eq	1.00E-2	1.45E-4	6.75E-4	1.08E-2	1.35E-4	2.04E-3	7.59E-5	-4.37E-3	8.72E-3
MAETP	kg 1,4-DB-eq	2.33E+1	5.21E-1	2.66E+0	2.65E+1	4.84E-1	7.05E+0	9.28E-2	-1.00E+1	2.41E+1
TETP	kg 1,4-DB-eq	2.45E-3	1.75E-5	1.47E-3	3.93E-3	1.64E-5	4.79E-4	8.29E-7	-1.46E-3	2.97E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.72E-1	1.19E-2	4.87E-2	9.32E-1	1.09E-2	3.22E-1	3.46E-3	-4.44E-1	8.25E-1
GWP-f	kg CO2 eq	8.62E-1	1.19E-2	3.74E-2	9.12E-1	1.09E-2	3.03E-1	3.46E-3	-4.84E-1	7.45E-1
GWP-b	kg CO2 eq	8.63E-3	5.49E-6	7.72E-3	1.64E-2	6.62E-6	1.88E-2	4.37E-6	4.04E-2	7.56E-2
GWP-luluc	kg CO2 eq	9.79E-4	4.36E-6	3.55E-3	4.54E-3	3.86E-6	1.38E-4	9.08E-8	-6.06E-4	4.07E-3
ODP	kg CFC11 eq	4.69E-7	2.63E-9	3.95E-9	4.76E-7	2.51E-9	3.82E-8	1.29E-10	-2.37E-7	2.79E-7
AP	mol H+ eq	4.12E-3	6.90E-5	2.28E-4	4.41E-3	6.21E-5	6.48E-4	3.14E-6	-1.96E-3	3.16E-3
EP-fw	kg P eq	4.18E-5	1.20E-7	6.55E-7	4.26E-5	8.97E-8	4.62E-6	4.11E-9	-2.10E-5	2.63E-5
EP-m	kg N eq	7.39E-4	2.43E-5	5.39E-5	8.17E-4	2.22E-5	1.58E-4	1.95E-6	-3.51E-4	6.48E-4
EP-T	mol N eq	7.95E-3	2.68E-4	5.94E-4	8.82E-3	2.45E-4	1.74E-3	1.25E-5	-3.78E-3	7.04E-3
POCP	kg NMVOC eq	2.54E-3	7.65E-5	1.69E-4	2.79E-3	7.00E-5	5.22E-4	4.31E-6	-1.26E-3	2.13E-3
ADP-mm	kg Sb eq	8.58E-4	3.01E-7	1.30E-6	8.60E-4	2.82E-7	2.56E-6	3.15E-9	-9.82E-6	8.53E-4
ADP-f	MJ	2.14E+1	1.79E-1	4.18E-1	2.20E+1	1.67E-1	1.75E+0	9.43E-3	-1.16E+1	1.23E+1
WDP	m3 depriv.	1.42E+0	6.42E-4	3.24E-1	1.75E+0	5.13E-4	6.93E-2	6.11E-5	-7.34E-1	1.08E+0
PM	disease inc.	2.78E-8	1.07E-9	2.82E-9	3.17E-8	9.84E-10	8.01E-9	6.49E-11	-1.52E-8	2.55E-8
IR	kBq U-235 eq	4.91E-2	7.52E-4	6.65E-4	5.05E-2	7.31E-4	6.19E-3	4.33E-5	-2.43E-2	3.31E-2
ETP-fw	CTUe	2.65E+1	1.60E-1	9.71E-1	2.77E+1	1.36E-1	1.36E+1	1.51E-1	-9.76E+0	3.18E+1
HTP-c	CTUh	7.15E-10	5.19E-12	3.36E-11	7.54E-10	4.83E-12	1.94E-10	2.60E-13	-2.71E-10	6.82E-10
HTP-nc	CTUh	2.36E-8	1.75E-10	1.05E-9	2.49E-8	1.62E-10	4.71E-9	2.88E-11	-9.39E-9	2.04E-8
SQP	Pt	4.54E+0	1.56E-1	3.13E-2	4.73E+0	1.43E-1	1.07E+0	2.41E-2	-9.02E+0	-3.07E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.43E+0	2.25E-3	2.03E+0	3.47E+0	2.40E-3	1.27E-1	3.52E-4	-1.91E+0	1.69E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.43E+0	2.25E-3	2.03E+0	3.47E+0	2.40E-3	1.27E-1	3.52E-4	-1.91E+0	1.69E+0
PENRE	MJ	2.30E+1	1.90E-1	4.52E-1	2.36E+1	1.78E-1	1.86E+0	1.00E-2	-1.25E+1	1.32E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.30E+1	1.90E-1	4.52E-1	2.36E+1	1.78E-1	1.86E+0	1.00E-2	-1.25E+1	1.32E+1
PET	MJ	2.44E+1	1.93E-1	2.49E+0	2.71E+1	1.80E-1	1.99E+0	1.04E-2	-1.44E+1	1.48E+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	1.59E-2	2.18E-5	7.65E-3	2.36E-2	1.89E-5	1.90E-3	1.15E-5	-8.64E-3	1.69E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.23E-4	4.55E-7	4.44E-7	1.24E-4	4.28E-7	2.86E-6	1.15E-8	-9.85E-6	1.18E-4
NHWD	kg	8.99E-2	1.14E-2	6.86E-4	1.02E-1	1.04E-2	6.30E-2	4.14E-2	-3.92E-2	1.78E-1
RWD	kg	4.27E-5	1.18E-6	8.23E-7	4.47E-5	1.14E-6	6.64E-6	6.13E-8	-2.16E-5	3.09E-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