

Environmental Profile

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

Ecochain v3.5.80



Product: 3001146 - WfxPVC Coupler 250 GY/GD SN8
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

suitable for pressureless transport of rainwater and wastewater.

LCA standard: EN15804+A2 (2019)
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



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 - PL -Buk - Extra products (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 A5 Assembly / Construction installation process												D Reuse- Recovery- Recycling- potential				

Environmental impacts and parameters

GWP-total = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.92E+0	5.29E-2	1.45E-4	4.97E+0	6.25E-2	3.55E+0	2.08E-2	-2.91E+0	5.69E+0
GWP-f	kg CO2 eq	5.94E+0	5.29E-2	1.46E-4	5.99E+0	6.24E-2	2.37E+0	2.08E-2	-3.14E+0	5.30E+0
GWP-b	kg CO2 eq	-1.03E+0	3.21E-5	-1.54E-6	-1.03E+0	3.79E-5	1.17E+0	2.64E-5	2.34E-1	3.82E-1
GWP-luluc	kg CO2 eq	6.21E-3	1.87E-5	1.49E-7	6.23E-3	2.21E-5	7.85E-4	5.13E-7	-3.94E-3	3.10E-3
ODP	kg CFC11 eq	2.86E-6	1.22E-8	8.26E-12	2.88E-6	1.44E-8	2.21E-7	7.66E-10	-1.36E-6	1.75E-6
AP	mol H+ eq	2.77E-2	3.01E-4	1.47E-6	2.80E-2	3.56E-4	3.80E-3	1.86E-5	-1.21E-2	2.01E-2
EP-fw	kg P eq	2.56E-4	4.35E-7	8.24E-9	2.56E-4	5.14E-7	2.64E-5	2.36E-8	-1.24E-4	1.59E-4
EP-m	kg N eq	4.92E-3	1.08E-4	1.55E-7	5.03E-3	1.27E-4	9.48E-4	1.36E-5	-2.29E-3	3.83E-3
EP-T	mol N eq	5.29E-2	1.19E-3	1.85E-6	5.41E-2	1.40E-3	1.04E-2	7.42E-5	-2.49E-2	4.11E-2
POCP	kg NMVOC eq	1.86E-2	3.39E-4	6.28E-7	1.89E-2	4.01E-4	3.10E-3	2.56E-5	-8.39E-3	1.41E-2
ADP-mm	kg Sb eq	3.49E-4	1.37E-6	1.97E-8	3.50E-4	1.61E-6	1.47E-5	1.83E-8	-6.32E-5	3.03E-4
ADP-f	MJ	1.47E+2	8.12E-1	1.36E-3	1.48E+2	9.58E-1	1.00E+1	5.59E-2	-7.24E+1	8.67E+1
WDP	m3 depriv.	8.52E+0	2.49E-3	5.22E-5	8.52E+0	2.94E-3	4.02E-1	2.57E-4	-4.12E+0	4.81E+0
PM	disease inc.	2.26E-7	4.77E-9	9.08E-12	2.31E-7	5.63E-9	4.61E-8	3.84E-10	-1.06E-7	1.77E-7
IR	kBq U-235 eq	3.26E-1	3.55E-3	1.02E-6	3.30E-1	4.19E-3	3.56E-2	2.60E-4	-1.45E-1	2.25E-1
ETP-fw	CTUe	1.33E+2	6.59E-1	1.21E-2	1.34E+2	7.78E-1	7.91E+1	8.73E-1	-5.94E+1	1.56E+2
HTP-c	CTUh	4.27E-9	2.35E-11	6.17E-13	4.29E-9	2.77E-11	1.07E-9	1.47E-12	-1.91E-9	3.48E-9
HTP-nc	CTUh	1.26E-7	7.86E-10	1.57E-11	1.27E-7	9.27E-10	2.72E-8	1.68E-10	-5.55E-8	9.97E-8
SQP	Pt	1.19E+2	6.94E-1	2.24E-3	1.20E+2	8.20E-1	6.06E+0	1.44E-1	-1.27E+2	3.51E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.61E+1	1.16E-2	2.40E-2	3.62E+1	1.37E-2	7.24E-1	2.18E-3	-2.21E+1	1.48E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.61E+1	1.16E-2	2.40E-2	3.62E+1	1.37E-2	7.24E-1	2.18E-3	-2.21E+1	1.48E+1
PENRE	MJ	1.58E+2	8.62E-1	1.44E-3	1.59E+2	1.02E+0	1.07E+1	5.93E-2	-7.81E+1	9.24E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.58E+2	8.62E-1	1.44E-3	1.59E+2	1.02E+0	1.07E+1	5.93E-2	-7.81E+1	9.24E+1
PET	MJ	1.94E+2	8.73E-1	2.55E-2	1.95E+2	1.03E+0	1.14E+1	6.15E-2	-1.00E+2	1.07E+2
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	9.96E-2	9.18E-5	1.46E-6	9.97E-2	1.08E-4	1.15E-2	6.90E-5	-4.98E-2	6.17E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.19E-4	2.08E-6	2.73E-13	1.21E-4	2.45E-6	1.67E-5	6.71E-8	-6.68E-5	7.37E-5
NHWD	kg	6.13E-1	5.03E-2	1.05E-6	6.63E-1	5.94E-2	3.77E-1	2.47E-1	-2.61E-1	1.08E+0
RWD	kg	3.12E-4	5.52E-6	1.10E-13	3.18E-4	6.52E-6	3.82E-5	3.65E-7	-1.32E-4	2.31E-4
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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