

Environmental Profile

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

Ecochain v3.5.80



Product: 3026061 - PVC Bend 67°3 GY 32 S/S BC
 Unit: 1 piece
 Manufacturer: Wavin - PL -Buk - Extra products

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



With the PVC range to be glued Wavin, you benefit from a complete choice of pipes and fittings 100% compatible, in all standard sizes on the market, from 32 to 315mm. This system includes a wide range of special accessories: branch saddles, flexible connectors, etc. Certified quality: Wavin glue-on PVC products benefit from the necessary certifications in France (NF-E).

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

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 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]

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	8.98E-2	7.79E-3	1.45E-4	9.78E-2	1.24E-3	8.16E-2	3.85E-4	-6.13E-2	1.20E-1
GWP-f	kg CO2 eq	1.22E-1	7.78E-3	1.46E-4	1.30E-1	1.24E-3	4.56E-2	3.85E-4	-6.72E-2	1.10E-1
GWP-b	kg CO2 eq	-3.25E-2	4.72E-6	-1.54E-6	-3.25E-2	7.51E-7	3.60E-2	5.01E-7	5.93E-3	9.49E-3
GWP-luluc	kg CO2 eq	1.37E-4	2.75E-6	1.49E-7	1.40E-4	4.38E-7	1.62E-5	9.72E-9	-9.42E-5	6.28E-5
ODP	kg CFC11 eq	5.72E-8	1.79E-9	8.26E-12	5.90E-8	2.85E-10	4.58E-9	1.46E-11	-2.83E-8	3.55E-8
AP	mol H+ eq	5.56E-4	4.43E-5	1.47E-6	6.02E-4	7.05E-6	7.90E-5	3.53E-7	-2.65E-4	4.23E-4
EP-fw	kg P eq	5.29E-6	6.40E-8	8.24E-9	5.36E-6	1.02E-8	5.46E-7	4.48E-10	-2.72E-6	3.20E-6
EP-m	kg N eq	1.03E-4	1.59E-5	1.55E-7	1.19E-4	2.52E-6	1.98E-5	2.25E-7	-5.11E-5	9.02E-5
EP-T	mol N eq	1.09E-3	1.75E-4	1.85E-6	1.27E-3	2.78E-5	2.18E-4	1.41E-6	-5.59E-4	9.60E-4
POCP	kg NMVOC eq	3.81E-4	4.99E-5	6.28E-7	4.32E-4	7.94E-6	6.49E-5	4.85E-7	-1.88E-4	3.17E-4
ADP-mm	kg Sb eq	2.98E-6	2.01E-7	1.97E-8	3.20E-6	3.20E-8	3.07E-7	3.49E-10	-1.20E-6	2.34E-6
ADP-f	MJ	3.00E+0	1.19E-1	1.36E-3	3.12E+0	1.90E-2	2.08E-1	1.07E-3	-1.53E+0	1.82E+0
WDP	m3 depriv.	1.76E-1	3.66E-4	5.22E-5	1.76E-1	5.83E-5	8.20E-3	4.87E-6	-8.71E-2	9.75E-2
PM	disease inc.	4.48E-9	7.02E-10	9.08E-12	5.19E-9	1.12E-10	9.67E-10	7.33E-12	-2.48E-9	3.80E-9
IR	kBq U-235 eq	6.15E-3	5.22E-4	1.02E-6	6.67E-3	8.30E-5	7.44E-4	4.93E-6	-3.10E-3	4.40E-3
ETP-fw	CTUe	2.75E+0	9.70E-2	1.21E-2	2.86E+0	1.54E-2	1.62E+0	1.79E-2	-1.35E+0	3.17E+0
HTP-c	CTUh	8.69E-11	3.45E-12	6.17E-13	9.09E-11	5.49E-13	2.32E-11	2.80E-14	-4.41E-11	7.06E-11
HTP-nc	CTUh	2.51E-9	1.16E-10	1.57E-11	2.64E-9	1.84E-11	5.65E-10	3.39E-12	-1.20E-9	2.02E-9
SQP	Pt	3.41E+0	1.02E-1	2.24E-3	3.51E+0	1.62E-2	1.27E-1	2.74E-3	-3.61E+0	5.07E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.76E-1	1.71E-3	2.40E-2	8.02E-1	2.72E-4	1.50E-2	4.09E-5	-6.11E-1	2.06E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.76E-1	1.71E-3	2.40E-2	8.02E-1	2.72E-4	1.50E-2	4.09E-5	-6.11E-1	2.06E-1
PENRE	MJ	3.22E+0	1.27E-1	1.44E-3	3.35E+0	2.02E-2	2.21E-1	1.13E-3	-1.65E+0	1.94E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.22E+0	1.27E-1	1.44E-3	3.35E+0	2.02E-2	2.21E-1	1.13E-3	-1.65E+0	1.94E+0
PET	MJ	4.00E+0	1.28E-1	2.55E-2	4.15E+0	2.04E-2	2.36E-1	1.17E-3	-2.26E+0	2.14E+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	2.04E-3	1.35E-5	1.46E-6	2.06E-3	2.15E-6	2.27E-4	1.32E-6	-1.08E-3	1.21E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.40E-6	3.05E-7	2.73E-13	2.71E-6	4.86E-8	3.45E-7	1.28E-9	-1.46E-6	1.64E-6
NHWD	kg	1.28E-2	7.40E-3	1.05E-6	2.02E-2	1.18E-3	7.96E-3	4.70E-3	-5.90E-3	2.81E-2
RWD	kg	5.53E-6	8.12E-7	1.10E-13	6.34E-6	1.29E-7	8.02E-7	6.96E-9	-2.84E-6	4.44E-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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