

Environmental Profile

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

Ecochain v3.5.80



Product: 3026060 - PVC Bend 67°3 GY 40 S/S BC
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

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).

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]

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	1.18E-1	1.05E-2	1.45E-4	1.29E-1	1.55E-3	9.29E-2	4.83E-4	-7.65E-2	1.48E-1
GWP-f	kg CO2 eq	1.51E-1	1.05E-2	1.46E-4	1.61E-1	1.55E-3	5.68E-2	4.83E-4	-8.22E-2	1.38E-1
GWP-b	kg CO2 eq	-3.23E-2	6.37E-6	-1.54E-6	-3.23E-2	9.43E-7	3.60E-2	6.28E-7	5.83E-3	9.57E-3
GWP-luluc	kg CO2 eq	1.59E-4	3.71E-6	1.49E-7	1.63E-4	5.50E-7	2.03E-5	1.22E-8	-1.03E-4	8.10E-5
ODP	kg CFC11 eq	7.14E-8	2.42E-9	8.26E-12	7.38E-8	3.58E-10	5.72E-9	1.83E-11	-3.53E-8	4.46E-8
AP	mol H+ eq	6.84E-4	5.98E-5	1.47E-6	7.46E-4	8.85E-6	9.80E-5	4.43E-7	-3.17E-4	5.36E-4
EP-fw	kg P eq	6.49E-6	8.64E-8	8.24E-9	6.59E-6	1.28E-8	6.83E-7	5.62E-10	-3.22E-6	4.06E-6
EP-m	kg N eq	1.24E-4	2.14E-5	1.55E-7	1.46E-4	3.17E-6	2.44E-5	2.82E-7	-6.03E-5	1.13E-4
EP-T	mol N eq	1.33E-3	2.36E-4	1.85E-6	1.57E-3	3.49E-5	2.69E-4	1.78E-6	-6.58E-4	1.21E-3
POCP	kg NMVOC eq	4.64E-4	6.74E-5	6.28E-7	5.32E-4	9.97E-6	8.01E-5	6.09E-7	-2.22E-4	4.00E-4
ADP-mm	kg Sb eq	3.82E-6	2.71E-7	1.97E-8	4.11E-6	4.02E-8	3.81E-7	4.38E-10	-1.48E-6	3.05E-6
ADP-f	MJ	3.72E+0	1.61E-1	1.36E-3	3.88E+0	2.38E-2	2.59E-1	1.34E-3	-1.89E+0	2.28E+0
WDP	m3 depriv.	2.20E-1	4.94E-4	5.22E-5	2.20E-1	7.32E-5	1.03E-2	6.12E-6	-1.07E-1	1.24E-1
PM	disease inc.	5.35E-9	9.47E-10	9.08E-12	6.31E-9	1.40E-10	1.20E-9	9.21E-12	-2.81E-9	4.85E-9
IR	kBq U-235 eq	7.58E-3	7.04E-4	1.02E-6	8.28E-3	1.04E-4	9.24E-4	6.19E-6	-3.74E-3	5.58E-3
ETP-fw	CTUe	3.25E+0	1.31E-1	1.21E-2	3.39E+0	1.94E-2	2.03E+0	2.24E-2	-1.54E+0	3.93E+0
HTP-c	CTUh	1.06E-10	4.65E-12	6.17E-13	1.12E-10	6.89E-13	2.87E-11	3.52E-14	-5.13E-11	8.97E-11
HTP-nc	CTUh	3.13E-9	1.56E-10	1.57E-11	3.31E-9	2.31E-11	7.06E-10	4.26E-12	-1.45E-9	2.59E-9
SQP	Pt	3.51E+0	1.38E-1	2.24E-3	3.65E+0	2.04E-2	1.57E-1	3.44E-3	-3.64E+0	1.90E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.15E-1	2.31E-3	2.40E-2	9.42E-1	3.42E-4	1.87E-2	5.13E-5	-6.25E-1	3.36E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.15E-1	2.31E-3	2.40E-2	9.42E-1	3.42E-4	1.87E-2	5.13E-5	-6.25E-1	3.36E-1
PENRE	MJ	3.99E+0	1.71E-1	1.44E-3	4.16E+0	2.53E-2	2.75E-1	1.42E-3	-2.04E+0	2.43E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.99E+0	1.71E-1	1.44E-3	4.16E+0	2.53E-2	2.75E-1	1.42E-3	-2.04E+0	2.43E+0
PET	MJ	4.90E+0	1.73E-1	2.55E-2	5.10E+0	2.57E-2	2.94E-1	1.47E-3	-2.66E+0	2.76E+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	2.54E-3	1.82E-5	1.46E-6	2.56E-3	2.70E-6	2.84E-4	1.65E-6	-1.28E-3	1.56E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.93E-6	4.12E-7	2.73E-13	3.35E-6	6.10E-8	4.27E-7	1.61E-9	-1.76E-6	2.08E-6
NHWD	kg	1.55E-2	9.98E-3	1.05E-6	2.54E-2	1.48E-3	9.88E-3	5.91E-3	-6.95E-3	3.57E-2
RWD	kg	6.78E-6	1.10E-6	1.10E-13	7.88E-6	1.62E-7	9.93E-7	8.73E-9	-3.40E-6	5.64E-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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