

Environmental Profile

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

Ecochain v3.5.80



Product: 3026032 - PVC Branch 45° GY 40 S/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	1.96E-1	1.75E-2	1.45E-4	2.14E-1	2.50E-3	1.20E-1	7.78E-4	-1.16E-1	2.21E-1
GWP-f	kg CO2 eq	2.27E-1	1.75E-2	1.46E-4	2.45E-1	2.50E-3	8.30E-2	7.77E-4	-1.24E-1	2.08E-1
GWP-b	kg CO2 eq	-3.15E-2	1.06E-5	-1.54E-6	-3.15E-2	1.52E-6	3.69E-2	1.01E-6	7.65E-3	1.31E-2
GWP-luluc	kg CO2 eq	2.29E-4	6.18E-6	1.49E-7	2.35E-4	8.85E-7	3.26E-5	1.96E-8	-1.44E-4	1.24E-4
ODP	kg CFC11 eq	1.14E-7	4.02E-9	8.26E-12	1.18E-7	5.76E-10	9.14E-9	2.95E-11	-5.58E-8	7.20E-8
AP	mol H+ eq	1.03E-3	9.95E-5	1.47E-6	1.13E-3	1.42E-5	1.55E-4	7.14E-7	-4.80E-4	8.23E-4
EP-fw	kg P eq	9.90E-6	1.44E-7	8.24E-9	1.01E-5	2.06E-8	1.09E-6	9.05E-10	-4.90E-6	6.28E-6
EP-m	kg N eq	1.84E-4	3.56E-5	1.55E-7	2.19E-4	5.10E-6	3.81E-5	4.54E-7	-8.90E-5	1.74E-4
EP-T	mol N eq	1.96E-3	3.92E-4	1.85E-6	2.36E-3	5.62E-5	4.20E-4	2.86E-6	-9.65E-4	1.87E-3
POCP	kg NMVOC eq	6.78E-4	1.12E-4	6.28E-7	7.91E-4	1.61E-5	1.25E-4	9.81E-7	-3.26E-4	6.07E-4
ADP-mm	kg Sb eq	6.08E-6	4.52E-7	1.97E-8	6.55E-6	6.47E-8	6.05E-7	7.06E-10	-2.32E-6	4.90E-6
ADP-f	MJ	5.64E+0	2.68E-1	1.36E-3	5.90E+0	3.84E-2	4.12E-1	2.15E-3	-2.89E+0	3.47E+0
WDP	m3 depriv.	3.45E-1	8.23E-4	5.22E-5	3.46E-1	1.18E-4	1.65E-2	9.85E-6	-1.68E-1	1.95E-1
PM	disease inc.	7.71E-9	1.58E-9	9.08E-12	9.30E-9	2.26E-10	1.89E-9	1.48E-11	-3.97E-9	7.46E-9
IR	kBq U-235 eq	1.17E-2	1.17E-3	1.02E-6	1.29E-2	1.68E-4	1.47E-3	9.97E-6	-5.75E-3	8.76E-3
ETP-fw	CTUe	4.83E+0	2.18E-1	1.21E-2	5.06E+0	3.12E-2	3.27E+0	3.61E-2	-2.26E+0	6.14E+0
HTP-c	CTUh	1.60E-10	7.75E-12	6.17E-13	1.68E-10	1.11E-12	4.47E-11	5.67E-14	-7.39E-11	1.40E-10
HTP-nc	CTUh	4.91E-9	2.60E-10	1.57E-11	5.19E-9	3.72E-11	1.12E-9	6.85E-12	-2.23E-9	4.12E-9
SQP	Pt	3.85E+0	2.29E-1	2.24E-3	4.08E+0	3.28E-2	2.50E-1	5.54E-3	-4.12E+0	2.47E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.26E+0	3.85E-3	2.40E-2	1.29E+0	5.51E-4	3.00E-2	8.27E-5	-7.36E-1	5.84E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.26E+0	3.85E-3	2.40E-2	1.29E+0	5.51E-4	3.00E-2	8.27E-5	-7.36E-1	5.84E-1
PENRE	MJ	6.05E+0	2.85E-1	1.44E-3	6.33E+0	4.08E-2	4.38E-1	2.29E-3	-3.11E+0	3.70E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.05E+0	2.85E-1	1.44E-3	6.33E+0	4.08E-2	4.38E-1	2.29E-3	-3.11E+0	3.70E+0
PET	MJ	7.31E+0	2.88E-1	2.55E-2	7.62E+0	4.13E-2	4.68E-1	2.37E-3	-3.85E+0	4.29E+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	3.87E-3	3.03E-5	1.46E-6	3.90E-3	4.34E-6	4.54E-4	2.66E-6	-1.97E-3	2.39E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.50E-6	6.86E-7	2.73E-13	5.19E-6	9.82E-8	6.75E-7	2.59E-9	-2.60E-6	3.37E-6
NHWD	kg	2.29E-2	1.66E-2	1.05E-6	3.95E-2	2.38E-3	1.53E-2	9.51E-3	-1.02E-2	5.65E-2
RWD	kg	1.04E-5	1.82E-6	1.10E-13	1.22E-5	2.61E-7	1.57E-6	1.41E-8	-5.19E-6	8.89E-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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