

Environmental Profile

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

Ecochain v3.5.80



Product: 3011430 - PVC Elbow GY 5/8" inj.mld. IMR
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	5.87E-2	5.50E-4	1.45E-4	5.94E-2	9.18E-4	6.92E-2	2.88E-4	-4.90E-2	8.08E-2
GWP-f	kg CO2 eq	9.14E-2	5.50E-4	1.46E-4	9.21E-2	9.17E-4	3.51E-2	2.88E-4	-5.04E-2	7.80E-2
GWP-b	kg CO2 eq	-3.28E-2	3.34E-7	-1.54E-6	-3.28E-2	5.57E-7	3.41E-2	3.70E-7	1.47E-3	2.75E-3
GWP-luluc	kg CO2 eq	9.19E-5	1.95E-7	1.49E-7	9.22E-5	3.25E-7	1.19E-5	7.44E-9	-5.35E-5	5.09E-5
ODP	kg CFC11 eq	4.15E-8	1.27E-10	8.26E-12	4.16E-8	2.11E-10	3.31E-9	1.09E-11	-2.10E-8	2.42E-8
AP	mol H+ eq	4.20E-4	3.13E-6	1.47E-6	4.24E-4	5.23E-6	5.73E-5	2.63E-7	-1.92E-4	2.95E-4
EP-fw	kg P eq	3.86E-6	4.53E-9	8.24E-9	3.87E-6	7.55E-9	3.98E-7	3.39E-10	-1.83E-6	2.45E-6
EP-m	kg N eq	7.56E-5	1.12E-6	1.55E-7	7.69E-5	1.87E-6	1.43E-5	1.65E-7	-3.72E-5	5.61E-5
EP-T	mol N eq	8.18E-4	1.24E-5	1.85E-6	8.33E-4	2.06E-5	1.58E-4	1.05E-6	-4.07E-4	6.05E-4
POCP	kg NMVOC eq	2.92E-4	3.53E-6	6.28E-7	2.96E-4	5.89E-6	4.69E-5	3.61E-7	-1.41E-4	2.08E-4
ADP-mm	kg Sb eq	2.31E-6	1.42E-8	1.97E-8	2.35E-6	2.37E-8	2.21E-7	2.62E-10	-8.94E-7	1.70E-6
ADP-f	MJ	2.24E+0	8.44E-3	1.36E-3	2.25E+0	1.41E-2	1.51E-1	7.92E-4	-1.15E+0	1.27E+0
WDP	m3 depriv.	1.30E-1	2.59E-5	5.22E-5	1.30E-1	4.32E-5	5.96E-3	4.44E-6	-6.08E-2	7.49E-2
PM	disease inc.	3.43E-9	4.96E-11	9.08E-12	3.49E-9	8.28E-11	7.00E-10	5.45E-12	-1.73E-9	2.55E-9
IR	kBq U-235 eq	4.52E-3	3.69E-5	1.02E-6	4.56E-3	6.15E-5	5.40E-4	3.65E-6	-2.18E-3	2.99E-3
ETP-fw	CTUe	1.75E+0	6.85E-3	1.21E-2	1.77E+0	1.14E-2	1.17E+0	1.29E-2	-8.22E-1	2.15E+0
HTP-c	CTUh	7.10E-11	2.44E-13	6.17E-13	7.19E-11	4.07E-13	1.75E-11	2.14E-14	-3.42E-11	5.57E-11
HTP-nc	CTUh	1.89E-9	8.17E-12	1.57E-11	1.91E-9	1.36E-11	4.13E-10	2.47E-12	-8.10E-10	1.53E-9
SQP	Pt	3.13E+0	7.22E-3	2.24E-3	3.14E+0	1.20E-2	9.30E-2	2.03E-3	-2.75E+0	4.95E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.08E-1	1.21E-4	2.40E-2	6.32E-1	2.02E-4	1.09E-2	2.99E-5	-4.48E-1	1.95E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.08E-1	1.21E-4	2.40E-2	6.32E-1	2.02E-4	1.09E-2	2.99E-5	-4.48E-1	1.95E-1
PENRE	MJ	2.40E+0	8.96E-3	1.44E-3	2.41E+0	1.49E-2	1.61E-1	8.40E-4	-1.24E+0	1.35E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.40E+0	8.96E-3	1.44E-3	2.41E+0	1.49E-2	1.61E-1	8.40E-4	-1.24E+0	1.35E+0
PET	MJ	3.01E+0	9.08E-3	2.55E-2	3.04E+0	1.52E-2	1.72E-1	8.70E-4	-1.68E+0	1.55E+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	1.53E-3	9.55E-7	1.46E-6	1.53E-3	1.59E-6	1.65E-4	9.74E-7	-7.03E-4	9.95E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.82E-6	2.16E-8	2.73E-13	1.84E-6	3.60E-8	2.50E-7	9.58E-10	-1.14E-6	9.90E-7
NHWD	kg	9.80E-3	5.23E-4	1.05E-6	1.03E-2	8.73E-4	5.90E-3	3.49E-3	-4.51E-3	1.61E-2
RWD	kg	4.07E-6	5.74E-8	1.10E-13	4.13E-6	9.58E-8	5.81E-7	5.16E-9	-2.00E-6	2.81E-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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