

Environmental Profile

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

Ecochain v3.5.80



Product: 3011428 - PVC Elbow CR 5/8" inj.mld.
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	5.00E-2	5.35E-4	1.45E-4	5.07E-2	9.18E-4	6.24E-2	2.88E-4	-4.47E-2	6.96E-2
GWP-f	kg CO2 eq	8.25E-2	5.34E-4	1.46E-4	8.32E-2	9.17E-4	2.83E-2	2.88E-4	-4.61E-2	6.66E-2
GWP-b	kg CO2 eq	-3.26E-2	3.24E-7	-1.54E-6	-3.26E-2	5.57E-7	3.41E-2	3.70E-7	1.48E-3	2.95E-3
GWP-luluc	kg CO2 eq	8.49E-5	1.89E-7	1.49E-7	8.53E-5	3.25E-7	1.18E-5	7.44E-9	-5.33E-5	4.41E-5
ODP	kg CFC11 eq	4.12E-8	1.23E-10	8.26E-12	4.13E-8	2.11E-10	3.29E-9	1.09E-11	-2.06E-8	2.43E-8
AP	mol H+ eq	3.78E-4	3.04E-6	1.47E-6	3.82E-4	5.23E-6	5.61E-5	2.63E-7	-1.88E-4	2.56E-4
EP-fw	kg P eq	3.57E-6	4.40E-9	8.24E-9	3.58E-6	7.55E-9	3.96E-7	3.39E-10	-1.82E-6	2.16E-6
EP-m	kg N eq	6.83E-5	1.09E-6	1.55E-7	6.96E-5	1.87E-6	1.38E-5	1.65E-7	-3.61E-5	4.94E-5
EP-T	mol N eq	7.37E-4	1.20E-5	1.85E-6	7.51E-4	2.06E-5	1.53E-4	1.05E-6	-3.95E-4	5.30E-4
POCP	kg NMVOC eq	2.56E-4	3.43E-6	6.28E-7	2.60E-4	5.89E-6	4.55E-5	3.61E-7	-1.37E-4	1.75E-4
ADP-mm	kg Sb eq	2.16E-6	1.38E-8	1.97E-8	2.19E-6	2.37E-8	2.19E-7	2.62E-10	-8.91E-7	1.55E-6
ADP-f	MJ	2.01E+0	8.20E-3	1.36E-3	2.02E+0	1.41E-2	1.50E-1	7.92E-4	-1.07E+0	1.11E+0
WDP	m3 depriv.	1.23E-1	2.52E-5	5.22E-5	1.23E-1	4.32E-5	5.94E-3	4.44E-6	-6.05E-2	6.90E-2
PM	disease inc.	3.10E-9	4.82E-11	9.08E-12	3.15E-9	8.28E-11	6.89E-10	5.45E-12	-1.72E-9	2.21E-9
IR	kBq U-235 eq	4.29E-3	3.58E-5	1.02E-6	4.33E-3	6.15E-5	5.35E-4	3.65E-6	-2.15E-3	2.78E-3
ETP-fw	CTUe	1.60E+0	6.66E-3	1.21E-2	1.62E+0	1.14E-2	1.17E+0	1.29E-2	-8.16E-1	2.00E+0
HTP-c	CTUh	6.62E-11	2.37E-13	6.17E-13	6.71E-11	4.07E-13	1.66E-11	2.14E-14	-3.38E-11	5.03E-11
HTP-nc	CTUh	1.76E-9	7.94E-12	1.57E-11	1.78E-9	1.36E-11	4.05E-10	2.47E-12	-8.05E-10	1.40E-9
SQP	Pt	3.09E+0	7.01E-3	2.24E-3	3.10E+0	1.20E-2	9.19E-2	2.03E-3	-2.75E+0	4.53E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.09E-1	1.18E-4	2.40E-2	5.33E-1	2.02E-4	1.09E-2	2.99E-5	-4.48E-1	9.58E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.09E-1	1.18E-4	2.40E-2	5.33E-1	2.02E-4	1.09E-2	2.99E-5	-4.48E-1	9.58E-2
PENRE	MJ	2.16E+0	8.70E-3	1.44E-3	2.17E+0	1.49E-2	1.60E-1	8.40E-4	-1.15E+0	1.19E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.16E+0	8.70E-3	1.44E-3	2.17E+0	1.49E-2	1.60E-1	8.40E-4	-1.15E+0	1.19E+0
PET	MJ	2.66E+0	8.82E-3	2.55E-2	2.70E+0	1.52E-2	1.71E-1	8.70E-4	-1.60E+0	1.29E+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	1.38E-3	9.28E-7	1.46E-6	1.38E-3	1.59E-6	1.63E-4	9.74E-7	-6.96E-4	8.54E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.77E-6	2.10E-8	2.73E-13	1.79E-6	3.60E-8	2.46E-7	9.58E-10	-1.05E-6	1.03E-6
NHWD	kg	9.15E-3	5.08E-4	1.05E-6	9.66E-3	8.73E-4	5.55E-3	3.49E-3	-4.48E-3	1.51E-2
RWD	kg	3.89E-6	5.58E-8	1.10E-13	3.94E-6	9.58E-8	5.74E-7	5.16E-9	-1.97E-6	2.65E-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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