

Environmental Profile

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

Ecochain v3.5.80



Product: 3004652 - PVC Electro Pipe Vsv GY 5/8" L=4
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

LCA standard: NMD Bepalingsmethode 1.1 (2022)
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 Wavin electro PVC you not only opt for a complete range, but also for high quality.

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 - NL - Hardenberg - Verified (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

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **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 SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.07	0	0	0.08	0	0.02	0	-0.03	0.07
ADPE	kg Sb-eq	1.69E-5	3.57E-7	5.44E-7	1.79E-5	2.32E-7	1.97E-6	2.46E-9	-7.16E-6	1.29E-5
ADPF	kg Sb-eq	7.89E-3	1.03E-4	1.46E-4	8.14E-3	6.52E-5	6.93E-4	3.46E-6	-4.07E-3	4.83E-3
GWP	kg CO2-eq	6.57E-1	1.40E-2	2.59E-2	6.97E-1	8.88E-3	2.35E-1	2.24E-3	-3.43E-1	6.00E-1
ODP	kg CFC-11-eq	3.49E-7	2.48E-9	2.44E-9	3.54E-7	1.65E-9	2.84E-8	8.29E-11	-1.78E-7	2.07E-7
POCP	kg ethene-eq	4.30E-4	8.44E-6	1.14E-5	4.50E-4	5.33E-6	5.43E-5	5.90E-7	-1.76E-4	3.34E-4
AP	kg SO2-eq	2.59E-3	6.15E-5	1.02E-4	2.76E-3	3.82E-5	4.00E-4	1.85E-6	-1.12E-3	2.08E-3
EP	kg PO4 3--eq	3.04E-4	1.21E-5	1.61E-5	3.32E-4	7.63E-6	6.04E-5	7.20E-7	-1.35E-4	2.66E-4
HTP	kg 1,4-DB-eq	2.34E-1	5.89E-3	9.80E-3	2.50E-1	3.80E-3	1.06E-1	1.92E-4	-1.08E-1	2.52E-1
FAETP	kg 1,4-DB-eq	5.13E-3	1.72E-4	3.99E-4	5.70E-3	1.11E-4	1.59E-3	5.85E-5	-2.37E-3	5.09E-3
MAETP	kg 1,4-DB-eq	1.49E+1	6.18E-1	1.63E+0	1.71E+1	3.97E-1	5.26E+0	7.12E-2	-6.96E+0	1.59E+1
TETP	kg 1,4-DB-eq	1.62E-3	2.08E-5	6.08E-4	2.25E-3	1.35E-5	3.80E-4	6.35E-7	-7.87E-4	1.86E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	6.39E-1	1.41E-2	3.06E-2	6.84E-1	8.96E-3	2.77E-1	2.61E-3	-3.53E-1	6.20E-1
GWP-f	kg CO2 eq	6.75E-1	1.41E-2	2.39E-2	7.13E-1	8.95E-3	2.37E-1	2.60E-3	-3.51E-1	6.10E-1
GWP-b	kg CO2 eq	-3.60E-2	6.51E-6	5.17E-3	-3.08E-2	5.43E-6	4.08E-2	3.34E-6	-2.45E-3	7.52E-3
GWP-luluc	kg CO2 eq	4.93E-4	5.17E-6	1.46E-3	1.96E-3	3.17E-6	1.08E-4	6.92E-8	-2.33E-4	1.84E-3
ODP	kg CFC11 eq	3.44E-7	3.11E-9	2.89E-9	3.50E-7	2.06E-9	2.92E-8	1.03E-10	-1.76E-7	2.06E-7
AP	mol H+ eq	3.11E-3	8.18E-5	1.31E-4	3.33E-3	5.10E-5	5.01E-4	2.47E-6	-1.35E-3	2.53E-3
EP-fw	kg P eq	2.89E-5	1.42E-7	3.42E-7	2.94E-5	7.36E-8	3.59E-6	3.13E-9	-1.30E-5	2.01E-5
EP-m	kg N eq	5.30E-4	2.88E-5	3.85E-5	5.97E-4	1.82E-5	1.22E-4	1.52E-6	-2.35E-4	5.04E-4
EP-T	mol N eq	5.53E-3	3.18E-4	4.13E-4	6.26E-3	2.01E-4	1.34E-3	9.90E-6	-2.53E-3	5.28E-3
POCP	kg NMVOC eq	1.98E-3	9.07E-5	1.16E-4	2.19E-3	5.75E-5	4.03E-4	3.38E-6	-8.67E-4	1.79E-3
ADP-mm	kg Sb eq	1.69E-5	3.57E-7	5.44E-7	1.79E-5	2.32E-7	1.97E-6	2.46E-9	-7.16E-6	1.29E-5
ADP-f	MJ	1.68E+1	2.13E-1	2.77E-1	1.72E+1	1.37E-1	1.37E+0	7.48E-3	-8.53E+0	1.02E+1
WDP	m3 depriv.	1.04E+0	7.61E-4	1.87E-1	1.23E+0	4.22E-4	5.39E-2	4.17E-5	-5.06E-1	7.81E-1
PM	disease inc.	2.28E-8	1.27E-9	2.03E-9	2.61E-8	8.08E-10	6.24E-9	5.13E-11	-8.74E-9	2.44E-8
IR	kBq U-235 eq	3.34E-2	8.91E-4	5.00E-4	3.48E-2	6.00E-4	4.80E-3	3.44E-5	-1.64E-2	2.38E-2
ETP-fw	CTUe	1.05E+1	1.90E-1	4.62E-1	1.11E+1	1.12E-1	1.04E+1	1.15E-1	-5.05E+0	1.67E+1
HTP-c	CTUh	4.23E-10	6.15E-12	1.58E-11	4.45E-10	3.97E-12	1.50E-10	1.96E-13	-1.87E-10	4.12E-10
HTP-nc	CTUh	1.35E-8	2.07E-10	4.82E-10	1.42E-8	1.33E-10	3.64E-9	2.20E-11	-6.47E-9	1.15E-8
SQP	Pt	5.65E+0	1.84E-1	2.07E-2	5.86E+0	1.18E-1	8.51E-1	1.90E-2	-1.70E+0	5.15E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.32E+0	2.66E-3	8.36E-1	2.16E+0	1.97E-3	9.88E-2	2.73E-4	-5.28E-1	1.73E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.32E+0	2.66E-3	8.36E-1	2.16E+0	1.97E-3	9.88E-2	2.73E-4	-5.28E-1	1.73E+0
PENRE	MJ	1.80E+1	2.26E-1	3.00E-1	1.85E+1	1.46E-1	1.46E+0	7.93E-3	-9.19E+0	1.09E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.80E+1	2.26E-1	3.00E-1	1.85E+1	1.46E-1	1.46E+0	7.93E-3	-9.19E+0	1.09E+1
PET	MJ	1.93E+1	2.28E-1	1.14E+0	2.07E+1	1.48E-1	1.56E+0	8.21E-3	-9.72E+0	1.27E+1
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	1.13E-2	2.59E-5	4.41E-3	1.57E-2	1.55E-5	1.47E-3	9.17E-6	-5.29E-3	1.19E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.26E-5	5.39E-7	3.88E-7	1.35E-5	3.51E-7	2.21E-6	9.02E-9	-7.07E-6	8.99E-6
NHWD	kg	6.05E-2	1.35E-2	5.60E-4	7.46E-2	8.51E-3	5.07E-2	3.40E-2	-2.72E-2	1.41E-1
RWD	kg	2.93E-5	1.40E-6	6.97E-7	3.14E-5	9.34E-7	5.14E-6	4.88E-8	-1.44E-5	2.31E-5
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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