

Environmental Profile

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

Ecochain v3.5.80



Product: 3004668 - PVC Electro Pipe 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	0.07	0	0.02	0	-0.03	0.06
ADPE	kg Sb-eq	1.66E-5	3.56E-7	5.32E-7	1.75E-5	2.26E-7	1.92E-6	2.39E-9	-6.95E-6	1.27E-5
ADPF	kg Sb-eq	7.38E-3	1.03E-4	1.42E-4	7.63E-3	6.37E-5	6.75E-4	3.37E-6	-3.94E-3	4.43E-3
GWP	kg CO2-eq	5.93E-1	1.39E-2	2.53E-2	6.33E-1	8.67E-3	2.26E-1	2.17E-3	-3.31E-1	5.38E-1
ODP	kg CFC-11-eq	3.49E-7	2.47E-9	2.38E-9	3.54E-7	1.61E-9	2.76E-8	8.08E-11	-1.72E-7	2.11E-7
POCP	kg ethene-eq	3.66E-4	8.41E-6	1.12E-5	3.86E-4	5.20E-6	5.29E-5	5.74E-7	-1.71E-4	2.73E-4
AP	kg SO2-eq	2.28E-3	6.13E-5	9.94E-5	2.44E-3	3.73E-5	3.89E-4	1.80E-6	-1.08E-3	1.79E-3
EP	kg PO4 3--eq	2.73E-4	1.20E-5	1.57E-5	3.01E-4	7.45E-6	5.88E-5	7.01E-7	-1.31E-4	2.36E-4
HTP	kg 1,4-DB-eq	2.30E-1	5.87E-3	9.56E-3	2.46E-1	3.71E-3	1.04E-1	1.87E-4	-1.05E-1	2.48E-1
FAETP	kg 1,4-DB-eq	4.99E-3	1.71E-4	3.89E-4	5.55E-3	1.09E-4	1.54E-3	5.74E-5	-2.30E-3	4.96E-3
MAETP	kg 1,4-DB-eq	1.45E+1	6.17E-1	1.59E+0	1.68E+1	3.88E-1	5.09E+0	6.97E-2	-6.76E+0	1.55E+1
TETP	kg 1,4-DB-eq	1.61E-3	2.07E-5	5.94E-4	2.23E-3	1.31E-5	3.71E-4	6.18E-7	-7.64E-4	1.85E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.73E-1	1.41E-2	2.98E-2	6.17E-1	8.75E-3	2.68E-1	2.53E-3	-3.42E-1	5.55E-1
GWP-f	kg CO2 eq	6.09E-1	1.41E-2	2.34E-2	6.46E-1	8.74E-3	2.27E-1	2.53E-3	-3.39E-1	5.46E-1
GWP-b	kg CO2 eq	-3.61E-2	6.49E-6	5.05E-3	-3.11E-2	5.31E-6	4.08E-2	3.25E-6	-2.38E-3	7.39E-3
GWP-luluc	kg CO2 eq	4.89E-4	5.15E-6	1.42E-3	1.92E-3	3.09E-6	1.05E-4	6.71E-8	-2.26E-4	1.80E-3
ODP	kg CFC11 eq	3.44E-7	3.10E-9	2.82E-9	3.50E-7	2.01E-9	2.84E-8	1.00E-10	-1.70E-7	2.10E-7
AP	mol H+ eq	2.75E-3	8.16E-5	1.27E-4	2.96E-3	4.98E-5	4.88E-4	2.41E-6	-1.31E-3	2.19E-3
EP-fw	kg P eq	2.69E-5	1.42E-7	3.34E-7	2.74E-5	7.19E-8	3.50E-6	3.04E-9	-1.26E-5	1.83E-5
EP-m	kg N eq	4.64E-4	2.87E-5	3.76E-5	5.31E-4	1.78E-5	1.19E-4	1.48E-6	-2.28E-4	4.41E-4
EP-T	mol N eq	5.02E-3	3.17E-4	4.03E-4	5.74E-3	1.96E-4	1.31E-3	9.64E-6	-2.46E-3	4.80E-3
POCP	kg NMVOC eq	1.74E-3	9.05E-5	1.14E-4	1.95E-3	5.61E-5	3.92E-4	3.29E-6	-8.42E-4	1.56E-3
ADP-mm	kg Sb eq	1.66E-5	3.56E-7	5.32E-7	1.75E-5	2.26E-7	1.92E-6	2.39E-9	-6.95E-6	1.27E-5
ADP-f	MJ	1.57E+1	2.12E-1	2.70E-1	1.62E+1	1.34E-1	1.34E+0	7.29E-3	-8.27E+0	9.41E+0
WDP	m3 depriv.	1.03E+0	7.59E-4	1.83E-1	1.22E+0	4.12E-4	5.24E-2	3.98E-5	-4.91E-1	7.77E-1
PM	disease inc.	1.99E-8	1.26E-9	1.98E-9	2.31E-8	7.89E-10	6.08E-9	5.00E-11	-8.50E-9	2.15E-8
IR	kBq U-235 eq	3.33E-2	8.89E-4	4.88E-4	3.46E-2	5.87E-4	4.68E-3	3.35E-5	-1.59E-2	2.41E-2
ETP-fw	CTUe	1.03E+1	1.89E-1	4.51E-1	1.09E+1	1.09E-1	1.01E+1	1.12E-1	-4.90E+0	1.63E+1
HTP-c	CTUh	4.15E-10	6.13E-12	1.54E-11	4.36E-10	3.88E-12	1.46E-10	1.91E-13	-1.82E-10	4.04E-10
HTP-nc	CTUh	1.33E-8	2.07E-10	4.71E-10	1.39E-8	1.30E-10	3.54E-9	2.14E-11	-6.28E-9	1.14E-8
SQP	Pt	5.63E+0	1.84E-1	2.02E-2	5.83E+0	1.15E-1	8.31E-1	1.85E-2	-1.67E+0	5.13E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.31E+0	2.66E-3	8.16E-1	2.13E+0	1.93E-3	9.62E-2	2.66E-4	-5.17E-1	1.71E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.31E+0	2.66E-3	8.16E-1	2.13E+0	1.93E-3	9.62E-2	2.66E-4	-5.17E-1	1.71E+0
PENRE	MJ	1.69E+1	2.25E-1	2.93E-1	1.74E+1	1.42E-1	1.42E+0	7.73E-3	-8.91E+0	1.00E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.69E+1	2.25E-1	2.93E-1	1.74E+1	1.42E-1	1.42E+0	7.73E-3	-8.91E+0	1.00E+1
PET	MJ	1.82E+1	2.28E-1	1.11E+0	1.95E+1	1.44E-1	1.52E+0	8.00E-3	-9.42E+0	1.18E+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	1.09E-2	2.58E-5	4.31E-3	1.53E-2	1.52E-5	1.44E-3	8.94E-6	-5.14E-3	1.16E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.25E-5	5.37E-7	3.79E-7	1.34E-5	3.43E-7	2.15E-6	8.78E-9	-6.83E-6	9.09E-6
NHWD	kg	5.93E-2	1.35E-2	5.47E-4	7.33E-2	8.32E-3	4.94E-2	3.32E-2	-2.64E-2	1.38E-1
RWD	kg	2.92E-5	1.39E-6	6.80E-7	3.13E-5	9.13E-7	5.01E-6	4.76E-8	-1.40E-5	2.32E-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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