

Environmental Profile

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

Ecochain v3.5.80



Product: 3004662 - PVC Electro pipe GY 3/4" L=4 Cont
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	0.08	0	0	0.09	0	0.03	0	-0.04	0.08
ADPE	kg Sb-eq	2.05E-5	4.35E-7	6.60E-7	2.16E-5	2.81E-7	2.38E-6	2.96E-9	-8.61E-6	1.56E-5
ADPF	kg Sb-eq	9.10E-3	1.25E-4	1.77E-4	9.40E-3	7.90E-5	8.36E-4	4.18E-6	-4.89E-3	5.44E-3
GWP	kg CO2-eq	7.28E-1	1.70E-2	3.14E-2	7.77E-1	1.08E-2	2.80E-1	2.70E-3	-4.10E-1	6.60E-1
ODP	kg CFC-11-eq	4.32E-7	3.02E-9	2.95E-9	4.38E-7	2.00E-9	3.42E-8	1.00E-10	-2.13E-7	2.61E-7
POCP	kg ethene-eq	4.45E-4	1.03E-5	1.38E-5	4.69E-4	6.46E-6	6.50E-5	7.13E-7	-2.10E-4	3.32E-4
AP	kg SO2-eq	2.78E-3	7.48E-5	1.23E-4	2.98E-3	4.63E-5	4.79E-4	2.23E-6	-1.33E-3	2.18E-3
EP	kg PO4 3--eq	3.29E-4	1.47E-5	1.95E-5	3.63E-4	9.25E-6	7.21E-5	8.70E-7	-1.58E-4	2.87E-4
HTP	kg 1,4-DB-eq	2.82E-1	7.16E-3	1.19E-2	3.01E-1	4.60E-3	1.28E-1	2.32E-4	-1.29E-1	3.05E-1
FAETP	kg 1,4-DB-eq	6.09E-3	2.09E-4	4.83E-4	6.78E-3	1.35E-4	1.90E-3	7.12E-5	-2.82E-3	6.06E-3
MAETP	kg 1,4-DB-eq	1.77E+1	7.52E-1	1.97E+0	2.05E+1	4.82E-1	6.30E+0	8.65E-2	-8.34E+0	1.90E+1
TETP	kg 1,4-DB-eq	1.97E-3	2.53E-5	7.37E-4	2.74E-3	1.63E-5	4.59E-4	7.66E-7	-9.40E-4	2.27E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.54E-1	1.72E-2	3.70E-2	8.08E-1	1.09E-2	2.82E-1	3.14E-3	-4.23E-1	6.81E-1
GWP-f	kg CO2 eq	7.47E-1	1.72E-2	2.90E-2	7.93E-1	1.08E-2	2.82E-1	3.14E-3	-4.20E-1	6.70E-1
GWP-b	kg CO2 eq	6.18E-3	7.92E-6	6.27E-3	1.25E-2	6.59E-6	-2.90E-4	4.03E-6	-2.96E-3	9.22E-3
GWP-luluc	kg CO2 eq	5.76E-4	6.29E-6	1.77E-3	2.35E-3	3.84E-6	1.30E-4	8.33E-8	-2.74E-4	2.21E-3
ODP	kg CFC11 eq	4.26E-7	3.79E-9	3.50E-9	4.33E-7	2.50E-9	3.52E-8	1.25E-10	-2.11E-7	2.60E-7
AP	mol H+ eq	3.35E-3	9.95E-5	1.58E-4	3.60E-3	6.18E-5	6.00E-4	2.99E-6	-1.60E-3	2.67E-3
EP-fw	kg P eq	3.29E-5	1.73E-7	4.15E-7	3.35E-5	8.92E-8	4.34E-6	3.78E-9	-1.56E-5	2.24E-5
EP-m	kg N eq	5.59E-4	3.51E-5	4.66E-5	6.41E-4	2.21E-5	1.45E-4	1.84E-6	-2.76E-4	5.33E-4
EP-T	mol N eq	6.02E-3	3.87E-4	5.00E-4	6.91E-3	2.44E-4	1.60E-3	1.20E-5	-2.94E-3	5.82E-3
POCP	kg NMVOC eq	2.11E-3	1.10E-4	1.41E-4	2.36E-3	6.96E-5	4.80E-4	4.08E-6	-1.03E-3	1.88E-3
ADP-mm	kg Sb eq	2.05E-5	4.35E-7	6.60E-7	2.16E-5	2.81E-7	2.38E-6	2.96E-9	-8.61E-6	1.56E-5
ADP-f	MJ	1.94E+1	2.59E-1	3.36E-1	2.00E+1	1.66E-1	1.65E+0	9.04E-3	-1.02E+1	1.16E+1
WDP	m3 depriv.	1.28E+0	9.25E-4	2.27E-1	1.50E+0	5.11E-4	6.50E-2	4.94E-5	-6.09E-1	9.60E-1
PM	disease inc.	2.20E-8	1.54E-9	2.45E-9	2.60E-8	9.79E-10	7.50E-9	6.20E-11	-1.01E-8	2.44E-8
IR	kBq U-235 eq	4.07E-2	1.08E-3	6.06E-4	4.24E-2	7.28E-4	5.78E-3	4.16E-5	-1.96E-2	2.93E-2
ETP-fw	CTUe	1.25E+1	2.31E-1	5.60E-1	1.33E+1	1.35E-1	1.26E+1	1.39E-1	-5.88E+0	2.02E+1
HTP-c	CTUh	4.94E-10	7.48E-12	1.91E-11	5.21E-10	4.81E-12	1.77E-10	2.36E-13	-2.23E-10	4.81E-10
HTP-nc	CTUh	1.62E-8	2.52E-10	5.84E-10	1.71E-8	1.61E-10	4.38E-9	2.66E-11	-7.70E-9	1.39E-8
SQP	Pt	2.34E+0	2.24E-1	2.51E-2	2.59E+0	1.42E-1	1.03E+0	2.30E-2	-1.08E+0	2.70E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.27E-1	3.24E-3	1.01E+0	1.94E+0	2.39E-3	1.19E-1	3.31E-4	-4.43E-1	1.62E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.27E-1	3.24E-3	1.01E+0	1.94E+0	2.39E-3	1.19E-1	3.31E-4	-4.43E-1	1.62E+0
PENRE	MJ	2.08E+1	2.75E-1	3.64E-1	2.14E+1	1.77E-1	1.76E+0	9.59E-3	-1.10E+1	1.23E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.08E+1	2.75E-1	3.64E-1	2.14E+1	1.77E-1	1.76E+0	9.59E-3	-1.10E+1	1.23E+1
PET	MJ	2.17E+1	2.78E-1	1.38E+0	2.34E+1	1.79E-1	1.88E+0	9.92E-3	-1.15E+1	1.40E+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	1.35E-2	3.15E-5	5.35E-3	1.88E-2	1.88E-5	1.77E-3	1.11E-5	-6.37E-3	1.43E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.51E-5	6.56E-7	4.70E-7	1.63E-5	4.26E-7	2.66E-6	1.09E-8	-8.43E-6	1.09E-5
NHWD	kg	7.12E-2	1.64E-2	6.78E-4	8.83E-2	1.03E-2	6.03E-2	4.12E-2	-3.23E-2	1.68E-1
RWD	kg	3.56E-5	1.70E-6	8.44E-7	3.81E-5	1.13E-6	6.19E-6	5.91E-8	-1.73E-5	2.82E-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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