

Environmental Profile

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

Ecochain v3.5.80



Product: 3004131 - PVC RWA Socket GY 70 S/RSP
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

Wavin carries a complete PVC range of outdoor sewers. With PVC as a material, a smooth-walled, flexible and completely watertight piping system is obtained. Moreover, PVC is absolutely resistant to all substances that occur in domestic waste water. By working with a light material, large pipe lengths and plug connections, a very fast installation is guaranteed.

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



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]

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Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.01	0	0	0.01	0	0	0	-0.01	0.01
ADPE	kg Sb-eq	9.33E-5	3.26E-8	1.44E-7	9.35E-5	3.06E-8	2.78E-7	3.42E-10	-1.07E-6	9.27E-5
ADPF	kg Sb-eq	1.09E-3	9.39E-6	2.47E-5	1.13E-3	8.63E-6	9.60E-5	4.74E-7	-5.99E-4	6.33E-4
GWP	kg CO2-eq	9.15E-2	1.28E-3	4.69E-3	9.75E-2	1.18E-3	3.29E-2	3.23E-4	-5.14E-2	8.05E-2
ODP	kg CFC-11-eq	5.16E-8	2.27E-10	3.71E-10	5.22E-8	2.18E-10	4.03E-9	1.13E-11	-2.61E-8	3.04E-8
POCP	kg ethene-eq	5.25E-5	7.70E-7	2.04E-6	5.53E-5	7.05E-7	7.58E-6	8.37E-8	-2.67E-5	3.70E-5
AP	kg SO2-eq	3.67E-4	5.61E-6	2.02E-5	3.93E-4	5.06E-6	5.60E-5	2.55E-7	-1.75E-4	2.79E-4
EP	kg PO4 3--eq	4.71E-5	1.10E-6	2.59E-6	5.08E-5	1.01E-6	8.49E-6	1.01E-7	-2.36E-5	3.68E-5
HTP	kg 1,4-DB-eq	3.58E-2	5.38E-4	2.18E-3	3.85E-2	5.03E-4	1.46E-2	2.68E-5	-1.67E-2	3.69E-2
FAETP	kg 1,4-DB-eq	1.08E-3	1.57E-5	7.45E-5	1.17E-3	1.47E-5	2.22E-4	8.25E-6	-4.65E-4	9.48E-4
MAETP	kg 1,4-DB-eq	2.53E+0	5.64E-2	2.93E-1	2.88E+0	5.26E-2	7.65E-1	1.01E-2	-1.08E+0	2.62E+0
TETP	kg 1,4-DB-eq	2.65E-4	1.90E-6	1.62E-4	4.29E-4	1.78E-6	5.20E-5	9.01E-8	-1.56E-4	3.27E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.47E-2	1.29E-3	5.37E-3	1.01E-1	1.19E-3	3.50E-2	3.76E-4	-4.86E-2	8.94E-2
GWP-f	kg CO2 eq	9.36E-2	1.29E-3	4.13E-3	9.91E-2	1.18E-3	3.31E-2	3.76E-4	-5.26E-2	8.12E-2
GWP-b	kg CO2 eq	9.28E-4	5.94E-7	8.52E-4	1.78E-3	7.19E-7	1.89E-3	4.75E-7	4.06E-3	7.73E-3
GWP-luluc	kg CO2 eq	1.05E-4	4.72E-7	3.92E-4	4.97E-4	4.19E-7	1.50E-5	9.87E-9	-6.35E-5	4.49E-4
ODP	kg CFC11 eq	5.09E-8	2.84E-10	4.36E-10	5.17E-8	2.73E-10	4.15E-9	1.40E-11	-2.58E-8	3.03E-8
AP	mol H+ eq	4.47E-4	7.47E-6	2.52E-5	4.79E-4	6.75E-6	7.03E-5	3.41E-7	-2.12E-4	3.45E-4
EP-fw	kg P eq	4.53E-6	1.30E-8	7.23E-8	4.62E-6	9.75E-9	5.01E-7	4.47E-10	-2.25E-6	2.88E-6
EP-m	kg N eq	7.99E-5	2.63E-6	5.95E-6	8.85E-5	2.41E-6	1.72E-5	2.12E-7	-3.78E-5	7.05E-5
EP-T	mol N eq	8.61E-4	2.90E-5	6.56E-5	9.56E-4	2.66E-5	1.89E-4	1.36E-6	-4.06E-4	7.66E-4
POCP	kg NMVOC eq	2.76E-4	8.28E-6	1.87E-5	3.03E-4	7.61E-6	5.66E-5	4.68E-7	-1.36E-4	2.32E-4
ADP-mm	kg Sb eq	9.33E-5	3.26E-8	1.44E-7	9.35E-5	3.06E-8	2.78E-7	3.42E-10	-1.07E-6	9.27E-5
ADP-f	MJ	2.33E+0	1.94E-2	4.61E-2	2.39E+0	1.82E-2	1.90E-1	1.02E-3	-1.26E+0	1.34E+0
WDP	m3 depriv.	1.54E-1	6.95E-5	3.57E-2	1.90E-1	5.58E-5	7.54E-3	6.64E-6	-7.94E-2	1.18E-1
PM	disease inc.	3.01E-9	1.16E-10	3.11E-10	3.43E-9	1.07E-10	8.68E-10	7.05E-12	-1.63E-9	2.79E-9
IR	kBq U-235 eq	5.33E-3	8.14E-5	7.34E-5	5.48E-3	7.95E-5	6.72E-4	4.71E-6	-2.62E-3	3.61E-3
ETP-fw	CTUe	2.84E+0	1.73E-2	1.07E-1	2.97E+0	1.48E-2	1.48E+0	1.64E-2	-1.04E+0	3.45E+0
HTP-c	CTUh	7.76E-11	5.62E-13	3.71E-12	8.19E-11	5.25E-13	2.11E-11	2.83E-14	-2.93E-11	7.42E-11
HTP-nc	CTUh	2.57E-9	1.89E-11	1.16E-10	2.70E-9	1.76E-11	5.12E-10	3.14E-12	-1.01E-9	2.22E-9
SQP	Pt	4.81E-1	1.68E-2	3.45E-3	5.01E-1	1.56E-2	1.16E-1	2.63E-3	-9.20E-1	-2.85E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.53E-1	2.43E-4	2.24E-1	3.78E-1	2.61E-4	1.37E-2	3.83E-5	-1.96E-1	1.95E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.53E-1	2.43E-4	2.24E-1	3.78E-1	2.61E-4	1.37E-2	3.83E-5	-1.96E-1	1.95E-1
PENRE	MJ	2.50E+0	2.06E-2	4.99E-2	2.57E+0	1.93E-2	2.02E-1	1.09E-3	-1.36E+0	1.43E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.50E+0	2.06E-2	4.99E-2	2.57E+0	1.93E-2	2.02E-1	1.09E-3	-1.36E+0	1.43E+0
PET	MJ	2.65E+0	2.09E-2	2.74E-1	2.95E+0	1.96E-2	2.16E-1	1.13E-3	-1.56E+0	1.63E+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	1.73E-3	2.37E-6	8.44E-4	2.58E-3	2.06E-6	2.06E-4	1.26E-6	-9.26E-4	1.86E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.34E-5	4.92E-8	4.90E-8	1.35E-5	4.65E-8	3.10E-7	1.25E-9	-1.07E-6	1.28E-5
NHWD	kg	9.73E-3	1.23E-3	7.57E-5	1.10E-2	1.13E-3	6.84E-3	4.51E-3	-4.23E-3	1.93E-2
RWD	kg	4.63E-6	1.28E-7	9.08E-8	4.85E-6	1.24E-7	7.19E-7	6.66E-9	-2.33E-6	3.36E-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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