

Environmental Profile

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

Ecochain v3.5.80



Product: 3003088 - Wadal PVC Coupler GY 110
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

With Wadal you opt for a tensile-resistant system whose connections cannot slide apart. There is a solution for every indoor drainage situation, thanks to the very extensive range of PVC adhesive fittings and pipes. KOMO certified.

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	0.04	0	0	0.05	0	0.01	0	-0.02	0.04
ADPE	kg Sb-eq	3.90E-4	1.36E-7	6.04E-7	3.90E-4	1.28E-7	1.16E-6	1.43E-9	-4.45E-6	3.87E-4
ADPF	kg Sb-eq	4.56E-3	3.92E-5	1.04E-4	4.70E-3	3.60E-5	4.01E-4	1.98E-6	-2.50E-3	2.64E-3
GWP	kg CO2-eq	3.82E-1	5.33E-3	1.97E-2	4.07E-1	4.91E-3	1.37E-1	1.35E-3	-2.15E-1	3.35E-1
ODP	kg CFC-11-eq	2.16E-7	9.46E-10	1.56E-9	2.18E-7	9.10E-10	1.68E-8	4.72E-11	-1.09E-7	1.27E-7
POCP	kg ethene-eq	2.19E-4	3.22E-6	8.56E-6	2.30E-4	2.95E-6	3.17E-5	3.50E-7	-1.11E-4	1.54E-4
AP	kg SO2-eq	1.53E-3	2.34E-5	8.47E-5	1.64E-3	2.11E-5	2.34E-4	1.07E-6	-7.32E-4	1.16E-3
EP	kg PO4 3--eq	1.96E-4	4.61E-6	1.09E-5	2.12E-4	4.22E-6	3.54E-5	4.20E-7	-9.86E-5	1.53E-4
HTP	kg 1,4-DB-eq	1.49E-1	2.24E-3	9.15E-3	1.61E-1	2.10E-3	6.09E-2	1.12E-4	-6.99E-2	1.54E-1
FAETP	kg 1,4-DB-eq	4.50E-3	6.55E-5	3.13E-4	4.88E-3	6.15E-5	9.26E-4	3.45E-5	-1.95E-3	3.96E-3
MAETP	kg 1,4-DB-eq	1.06E+1	2.36E-1	1.23E+0	1.20E+1	2.20E-1	3.19E+0	4.22E-2	-4.52E+0	1.09E+1
TETP	kg 1,4-DB-eq	1.11E-3	7.93E-6	6.80E-4	1.79E-3	7.44E-6	2.17E-4	3.77E-7	-6.51E-4	1.37E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.95E-1	5.38E-3	2.25E-2	4.23E-1	4.95E-3	1.46E-1	1.57E-3	-2.02E-1	3.73E-1
GWP-f	kg CO2 eq	3.91E-1	5.38E-3	1.73E-2	4.13E-1	4.95E-3	1.38E-1	1.57E-3	-2.19E-1	3.38E-1
GWP-b	kg CO2 eq	3.90E-3	2.48E-6	3.58E-3	7.48E-3	3.01E-6	7.96E-3	1.99E-6	1.71E-2	3.25E-2
GWP-luluc	kg CO2 eq	4.38E-4	1.97E-6	1.64E-3	2.08E-3	1.75E-6	6.25E-5	4.12E-8	-2.66E-4	1.88E-3
ODP	kg CFC11 eq	2.13E-7	1.19E-9	1.83E-9	2.16E-7	1.14E-9	1.73E-8	5.86E-11	-1.08E-7	1.27E-7
AP	mol H+ eq	1.86E-3	3.12E-5	1.06E-4	2.00E-3	2.82E-5	2.93E-4	1.43E-6	-8.86E-4	1.44E-3
EP-fw	kg P eq	1.89E-5	5.42E-8	3.03E-7	1.93E-5	4.07E-8	2.09E-6	1.87E-9	-9.40E-6	1.20E-5
EP-m	kg N eq	3.33E-4	1.10E-5	2.49E-5	3.69E-4	1.01E-5	7.17E-5	8.84E-7	-1.58E-4	2.94E-4
EP-T	mol N eq	3.59E-3	1.21E-4	2.75E-4	3.99E-3	1.11E-4	7.90E-4	5.69E-6	-1.70E-3	3.20E-3
POCP	kg NMVOC eq	1.15E-3	3.46E-5	7.83E-5	1.26E-3	3.18E-5	2.36E-4	1.96E-6	-5.66E-4	9.67E-4
ADP-mm	kg Sb eq	3.90E-4	1.36E-7	6.04E-7	3.90E-4	1.28E-7	1.16E-6	1.43E-9	-4.45E-6	3.87E-4
ADP-f	MJ	9.71E+0	8.11E-2	1.94E-1	9.99E+0	7.60E-2	7.93E-1	4.28E-3	-5.27E+0	5.59E+0
WDP	m3 depriv.	6.45E-1	2.90E-4	1.50E-1	7.95E-1	2.33E-4	3.15E-2	2.77E-5	-3.32E-1	4.95E-1
PM	disease inc.	1.25E-8	4.83E-10	1.30E-9	1.43E-8	4.47E-10	3.63E-9	2.95E-11	-6.80E-9	1.16E-8
IR	kBq U-235 eq	2.22E-2	3.40E-4	3.08E-4	2.29E-2	3.32E-4	2.81E-3	1.97E-5	-1.10E-2	1.51E-2
ETP-fw	CTUe	1.19E+1	7.23E-2	4.50E-1	1.24E+1	6.17E-2	6.19E+0	6.84E-2	-4.33E+0	1.44E+1
HTP-c	CTUh	3.24E-10	2.35E-12	1.56E-11	3.42E-10	2.20E-12	8.81E-11	1.18E-13	-1.22E-10	3.10E-10
HTP-nc	CTUh	1.07E-8	7.91E-11	4.86E-10	1.13E-8	7.35E-11	2.14E-9	1.31E-11	-4.24E-9	9.27E-9
SQP	Pt	2.01E+0	7.03E-2	1.45E-2	2.10E+0	6.50E-2	4.83E-1	1.10E-2	-3.87E+0	-1.21E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.40E-1	1.02E-3	9.42E-1	1.58E+0	1.09E-3	5.74E-2	1.60E-4	-8.24E-1	8.17E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.40E-1	1.02E-3	9.42E-1	1.58E+0	1.09E-3	5.74E-2	1.60E-4	-8.24E-1	8.17E-1
PENRE	MJ	1.04E+1	8.61E-2	2.09E-1	1.07E+1	8.06E-2	8.43E-1	4.54E-3	-5.67E+0	5.97E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.04E+1	8.61E-2	2.09E-1	1.07E+1	8.06E-2	8.43E-1	4.54E-3	-5.67E+0	5.97E+0
PET	MJ	1.11E+1	8.71E-2	1.15E+0	1.23E+1	8.17E-2	9.01E-1	4.70E-3	-6.50E+0	6.79E+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	7.22E-3	9.88E-6	3.54E-3	1.08E-2	8.60E-6	8.62E-4	5.24E-6	-3.87E-3	7.78E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.60E-5	2.05E-7	2.06E-7	5.64E-5	1.94E-7	1.30E-6	5.21E-9	-4.46E-6	5.35E-5
NHWD	kg	4.06E-2	5.14E-3	3.18E-4	4.61E-2	4.71E-3	2.86E-2	1.88E-2	-1.77E-2	8.05E-2
RWD	kg	1.93E-5	5.32E-7	3.81E-7	2.02E-5	5.17E-7	3.01E-6	2.78E-8	-9.75E-6	1.40E-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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