

Environmental Profile

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

Ecochain v3.5.80



Product: 3003089 - Wadal PVC Coupler GY 125
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 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.

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	0.05	0	0	0.06	0	0.02	0	-0.03	0.05
ADPE	kg Sb-eq	4.85E-4	1.72E-7	7.52E-7	4.86E-4	1.59E-7	1.46E-6	1.78E-9	-5.57E-6	4.82E-4
ADPF	kg Sb-eq	5.71E-3	4.95E-5	1.29E-4	5.88E-3	4.49E-5	5.01E-4	2.46E-6	-3.13E-3	3.30E-3
GWP	kg CO2-eq	4.80E-1	6.73E-3	2.45E-2	5.11E-1	6.11E-3	1.71E-1	1.68E-3	-2.70E-1	4.20E-1
ODP	kg CFC-11-eq	2.69E-7	1.19E-9	1.94E-9	2.72E-7	1.13E-9	2.10E-8	5.88E-11	-1.36E-7	1.59E-7
POCP	kg ethene-eq	2.74E-4	4.06E-6	1.07E-5	2.89E-4	3.67E-6	3.98E-5	4.35E-7	-1.41E-4	1.92E-4
AP	kg SO2-eq	1.92E-3	2.96E-5	1.05E-4	2.06E-3	2.63E-5	2.93E-4	1.33E-6	-9.29E-4	1.45E-3
EP	kg PO4 3--eq	2.50E-4	5.82E-6	1.36E-5	2.69E-4	5.25E-6	4.45E-5	5.23E-7	-1.28E-4	1.91E-4
HTP	kg 1,4-DB-eq	1.87E-1	2.83E-3	1.14E-2	2.02E-1	2.61E-3	7.62E-2	1.39E-4	-8.84E-2	1.92E-1
FAETP	kg 1,4-DB-eq	5.79E-3	8.27E-5	3.89E-4	6.26E-3	7.66E-5	1.16E-3	4.29E-5	-2.57E-3	4.97E-3
MAETP	kg 1,4-DB-eq	1.33E+1	2.98E-1	1.53E+0	1.51E+1	2.73E-1	4.02E+0	5.25E-2	-5.72E+0	1.37E+1
TETP	kg 1,4-DB-eq	1.40E-3	1.00E-5	8.47E-4	2.25E-3	9.26E-6	2.71E-4	4.69E-7	-8.58E-4	1.68E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.96E-1	6.79E-3	2.81E-2	5.31E-1	6.16E-3	1.84E-1	1.96E-3	-2.50E-1	4.73E-1
GWP-f	kg CO2 eq	4.91E-1	6.79E-3	2.16E-2	5.19E-1	6.16E-3	1.72E-1	1.95E-3	-2.76E-1	4.23E-1
GWP-b	kg CO2 eq	4.93E-3	3.13E-6	4.45E-3	9.38E-3	3.74E-6	1.21E-2	2.47E-6	2.63E-2	4.77E-2
GWP-luluc	kg CO2 eq	5.73E-4	2.49E-6	2.05E-3	2.62E-3	2.18E-6	7.79E-5	5.13E-8	-3.66E-4	2.34E-3
ODP	kg CFC11 eq	2.65E-7	1.50E-9	2.28E-9	2.69E-7	1.42E-9	2.17E-8	7.29E-11	-1.34E-7	1.58E-7
AP	mol H+ eq	2.34E-3	3.94E-5	1.31E-4	2.52E-3	3.51E-5	3.68E-4	1.78E-6	-1.13E-3	1.79E-3
EP-fw	kg P eq	2.38E-5	6.85E-8	3.78E-7	2.43E-5	5.07E-8	2.61E-6	2.32E-9	-1.21E-5	1.48E-5
EP-m	kg N eq	4.24E-4	1.39E-5	3.11E-5	4.68E-4	1.26E-5	9.01E-5	1.10E-6	-2.02E-4	3.70E-4
EP-T	mol N eq	4.55E-3	1.53E-4	3.42E-4	5.05E-3	1.38E-4	9.93E-4	7.08E-6	-2.18E-3	4.01E-3
POCP	kg NMVOC eq	1.45E-3	4.37E-5	9.74E-5	1.59E-3	3.96E-5	2.97E-4	2.44E-6	-7.20E-4	1.21E-3
ADP-mm	kg Sb eq	4.85E-4	1.72E-7	7.52E-7	4.86E-4	1.59E-7	1.46E-6	1.78E-9	-5.57E-6	4.82E-4
ADP-f	MJ	1.22E+1	1.02E-1	2.41E-1	1.25E+1	9.46E-2	9.91E-1	5.33E-3	-6.61E+0	6.99E+0
WDP	m3 depriv.	8.04E-1	3.66E-4	1.87E-1	9.91E-1	2.90E-4	3.92E-2	3.45E-5	-4.20E-1	6.11E-1
PM	disease inc.	1.60E-8	6.10E-10	1.62E-9	1.82E-8	5.56E-10	4.55E-9	3.67E-11	-8.94E-9	1.44E-8
IR	kBq U-235 eq	2.79E-2	4.29E-4	3.83E-4	2.87E-2	4.13E-4	3.52E-3	2.45E-5	-1.40E-2	1.87E-2
ETP-fw	CTUe	1.54E+1	9.13E-2	5.60E-1	1.61E+1	7.68E-2	7.71E+0	8.51E-2	-5.77E+0	1.82E+1
HTP-c	CTUh	4.06E-10	2.96E-12	1.94E-11	4.28E-10	2.73E-12	1.10E-10	1.47E-13	-1.55E-10	3.86E-10
HTP-nc	CTUh	1.34E-8	9.99E-11	6.05E-10	1.41E-8	9.15E-11	2.67E-9	1.63E-11	-5.37E-9	1.15E-8
SQP	Pt	2.70E+0	8.88E-2	1.80E-2	2.81E+0	8.09E-2	6.04E-1	1.37E-2	-5.71E+0	-2.20E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.38E-1	1.28E-3	1.17E+0	2.01E+0	1.36E-3	7.16E-2	1.99E-4	-1.19E+0	8.96E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.38E-1	1.28E-3	1.17E+0	2.01E+0	1.36E-3	7.16E-2	1.99E-4	-1.19E+0	8.96E-1
PENRE	MJ	1.30E+1	1.09E-1	2.61E-1	1.34E+1	1.00E-1	1.05E+0	5.65E-3	-7.11E+0	7.46E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.30E+1	1.09E-1	2.61E-1	1.34E+1	1.00E-1	1.05E+0	5.65E-3	-7.11E+0	7.46E+0
PET	MJ	1.39E+1	1.10E-1	1.43E+0	1.54E+1	1.02E-1	1.13E+0	5.85E-3	-8.30E+0	8.36E+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	9.05E-3	1.25E-5	4.41E-3	1.35E-2	1.07E-5	1.07E-3	6.53E-6	-5.01E-3	9.56E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.98E-5	2.59E-7	2.56E-7	7.03E-5	2.42E-7	1.62E-6	6.49E-9	-5.61E-6	6.66E-5
NHWD	kg	5.14E-2	6.50E-3	3.95E-4	5.83E-2	5.86E-3	3.57E-2	2.34E-2	-2.24E-2	1.01E-1
RWD	kg	2.43E-5	6.72E-7	4.74E-7	2.54E-5	6.43E-7	3.77E-6	3.47E-8	-1.24E-5	1.74E-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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