

Environmental Profile

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

Ecochain v3.5.80



Product: 3003186 - Wadal PVC Tee 88° GY 125x50 S/S/S
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	0.09	0	0.01	0.1	0	0.03	0	-0.05	0.08
ADPE	kg Sb-eq	8.00E-4	2.89E-7	1.24E-6	8.02E-4	2.63E-7	2.42E-6	2.94E-9	-9.26E-6	7.95E-4
ADPF	kg Sb-eq	9.48E-3	8.31E-5	2.13E-4	9.77E-3	7.40E-5	8.31E-4	4.07E-6	-5.20E-3	5.48E-3
GWP	kg CO2-eq	8.01E-1	1.13E-2	4.04E-2	8.52E-1	1.01E-2	2.83E-1	2.77E-3	-4.50E-1	6.97E-1
ODP	kg CFC-11-eq	4.45E-7	2.00E-9	3.20E-9	4.50E-7	1.87E-9	3.48E-8	9.69E-11	-2.25E-7	2.62E-7
POCP	kg ethene-eq	4.56E-4	6.82E-6	1.76E-5	4.81E-4	6.05E-6	6.64E-5	7.18E-7	-2.36E-4	3.18E-4
AP	kg SO2-eq	3.21E-3	4.97E-5	1.74E-4	3.43E-3	4.34E-5	4.87E-4	2.19E-6	-1.57E-3	2.39E-3
EP	kg PO4 3--eq	4.22E-4	9.76E-6	2.24E-5	4.55E-4	8.66E-6	7.42E-5	8.63E-7	-2.22E-4	3.17E-4
HTP	kg 1,4-DB-eq	3.12E-1	4.76E-3	1.88E-2	3.36E-1	4.31E-3	1.26E-1	2.30E-4	-1.49E-1	3.18E-1
FAETP	kg 1,4-DB-eq	9.91E-3	1.39E-4	6.42E-4	1.07E-2	1.26E-4	1.93E-3	7.08E-5	-4.51E-3	8.30E-3
MAETP	kg 1,4-DB-eq	2.21E+1	4.99E-1	2.53E+0	2.51E+1	4.51E-1	6.73E+0	8.66E-2	-9.62E+0	2.28E+1
TETP	kg 1,4-DB-eq	2.34E-3	1.68E-5	1.40E-3	3.75E-3	1.53E-5	4.48E-4	7.73E-7	-1.51E-3	2.71E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.27E-1	1.14E-2	4.63E-2	8.85E-1	1.02E-2	3.09E-1	3.23E-3	-4.07E-1	8.00E-1
GWP-f	kg CO2 eq	8.18E-1	1.14E-2	3.56E-2	8.65E-1	1.02E-2	2.84E-1	3.22E-3	-4.60E-1	7.03E-1
GWP-b	kg CO2 eq	8.27E-3	5.26E-6	7.34E-3	1.56E-2	6.17E-6	2.43E-2	4.08E-6	5.31E-2	9.30E-2
GWP-luluc	kg CO2 eq	1.00E-3	4.17E-6	3.38E-3	4.38E-3	3.60E-6	1.29E-4	8.47E-8	-6.72E-4	3.84E-3
ODP	kg CFC11 eq	4.39E-7	2.51E-9	3.76E-9	4.45E-7	2.34E-9	3.59E-8	1.20E-10	-2.22E-7	2.61E-7
AP	mol H+ eq	3.92E-3	6.61E-5	2.17E-4	4.20E-3	5.79E-5	6.11E-4	2.93E-6	-1.90E-3	2.97E-3
EP-fw	kg P eq	4.00E-5	1.15E-7	6.23E-7	4.07E-5	8.36E-8	4.32E-6	3.83E-9	-2.09E-5	2.42E-5
EP-m	kg N eq	7.15E-4	2.33E-5	5.12E-5	7.90E-4	2.07E-5	1.50E-4	1.82E-6	-3.44E-4	6.19E-4
EP-T	mol N eq	7.67E-3	2.57E-4	5.65E-4	8.49E-3	2.28E-4	1.66E-3	1.17E-5	-3.71E-3	6.67E-3
POCP	kg NMVOC eq	2.43E-3	7.33E-5	1.61E-4	2.66E-3	6.52E-5	4.96E-4	4.02E-6	-1.22E-3	2.01E-3
ADP-mm	kg Sb eq	8.00E-4	2.89E-7	1.24E-6	8.02E-4	2.63E-7	2.42E-6	2.94E-9	-9.26E-6	7.95E-4
ADP-f	MJ	2.02E+1	1.72E-1	3.98E-1	2.08E+1	1.56E-1	1.64E+0	8.79E-3	-1.10E+1	1.16E+1
WDP	m3 depriv.	1.33E+0	6.14E-4	3.08E-1	1.64E+0	4.79E-4	6.48E-2	5.70E-5	-7.07E-1	9.97E-1
PM	disease inc.	2.71E-8	1.02E-9	2.68E-9	3.08E-8	9.17E-10	7.58E-9	6.05E-11	-1.57E-8	2.37E-8
IR	kBq U-235 eq	4.65E-2	7.20E-4	6.32E-4	4.78E-2	6.82E-4	5.84E-3	4.04E-5	-2.36E-2	3.07E-2
ETP-fw	CTUe	2.67E+1	1.53E-1	9.24E-1	2.77E+1	1.27E-1	1.27E+1	1.40E-1	-1.03E+1	3.05E+1
HTP-c	CTUh	6.74E-10	4.97E-12	3.20E-11	7.11E-10	4.51E-12	1.83E-10	2.43E-13	-2.62E-10	6.37E-10
HTP-nc	CTUh	2.23E-8	1.68E-10	9.98E-10	2.34E-8	1.51E-10	4.42E-9	2.69E-11	-9.06E-9	1.90E-8
SQP	Pt	4.85E+0	1.49E-1	2.97E-2	5.03E+0	1.33E-1	1.00E+0	2.25E-2	-1.12E+1	-4.99E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.46E+0	2.15E-3	1.93E+0	3.40E+0	2.24E-3	1.18E-1	3.28E-4	-2.28E+0	1.24E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.46E+0	2.15E-3	1.93E+0	3.40E+0	2.24E-3	1.18E-1	3.28E-4	-2.28E+0	1.24E+0
PENRE	MJ	2.17E+1	1.82E-1	4.30E-1	2.23E+1	1.66E-1	1.75E+0	9.33E-3	-1.18E+1	1.24E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.17E+1	1.82E-1	4.30E-1	2.23E+1	1.66E-1	1.75E+0	9.33E-3	-1.18E+1	1.24E+1
PET	MJ	2.31E+1	1.85E-1	2.36E+0	2.57E+1	1.68E-1	1.87E+0	9.66E-3	-1.41E+1	1.36E+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	1.51E-2	2.09E-5	7.27E-3	2.23E-2	1.76E-5	1.78E-3	1.08E-5	-8.63E-3	1.55E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.15E-4	4.35E-7	4.22E-7	1.16E-4	3.99E-7	2.70E-6	1.07E-8	-9.39E-6	1.10E-4
NHWD	kg	8.65E-2	1.09E-2	6.52E-4	9.81E-2	9.67E-3	5.93E-2	3.86E-2	-3.78E-2	1.68E-1
RWD	kg	4.05E-5	1.13E-6	7.83E-7	4.24E-5	1.06E-6	6.28E-6	5.72E-8	-2.11E-5	2.87E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777