

Environmental Profile

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

Ecochain v3.5.80



Product: 3003188 - Wadal PVC Tee 88° GY 125x75 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	0.11	0	0.01	0.11	0	0.03	0	-0.05	0.09
ADPE	kg Sb-eq	9.45E-4	3.36E-7	1.47E-6	9.47E-4	3.11E-7	2.84E-6	3.47E-9	-1.09E-5	9.40E-4
ADPF	kg Sb-eq	1.11E-2	9.67E-5	2.52E-4	1.15E-2	8.74E-5	9.77E-4	4.80E-6	-6.11E-3	6.44E-3
GWP	kg CO2-eq	9.36E-1	1.31E-2	4.78E-2	9.97E-1	1.19E-2	3.33E-1	3.27E-3	-5.26E-1	8.19E-1
ODP	kg CFC-11-eq	5.24E-7	2.33E-9	3.78E-9	5.31E-7	2.21E-9	4.10E-8	1.14E-10	-2.65E-7	3.09E-7
POCP	kg ethene-eq	5.35E-4	7.93E-6	2.08E-5	5.63E-4	7.15E-6	7.76E-5	8.48E-7	-2.75E-4	3.74E-4
AP	kg SO2-eq	3.75E-3	5.78E-5	2.05E-4	4.02E-3	5.12E-5	5.71E-4	2.58E-6	-1.82E-3	2.82E-3
EP	kg PO4 3--eq	4.88E-4	1.14E-5	2.64E-5	5.26E-4	1.02E-5	8.68E-5	1.02E-6	-2.51E-4	3.73E-4
HTP	kg 1,4-DB-eq	3.66E-1	5.54E-3	2.22E-2	3.93E-1	5.09E-3	1.49E-1	2.71E-4	-1.73E-1	3.75E-1
FAETP	kg 1,4-DB-eq	1.13E-2	1.62E-4	7.58E-4	1.23E-2	1.49E-4	2.26E-3	8.36E-5	-5.04E-3	9.71E-3
MAETP	kg 1,4-DB-eq	2.59E+1	5.81E-1	2.99E+0	2.94E+1	5.33E-1	7.85E+0	1.02E-1	-1.12E+1	2.67E+1
TETP	kg 1,4-DB-eq	2.73E-3	1.96E-5	1.65E-3	4.40E-3	1.80E-5	5.28E-4	9.13E-7	-1.69E-3	3.26E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.68E-1	1.33E-2	5.47E-2	1.04E+0	1.20E-2	3.60E-1	3.81E-3	-4.86E-1	9.25E-1
GWP-f	kg CO2 eq	9.57E-1	1.33E-2	4.20E-2	1.01E+0	1.20E-2	3.35E-1	3.81E-3	-5.38E-1	8.26E-1
GWP-b	kg CO2 eq	9.62E-3	6.12E-6	8.67E-3	1.83E-2	7.29E-6	2.42E-2	4.82E-6	5.26E-2	9.51E-2
GWP-luluc	kg CO2 eq	1.12E-3	4.86E-6	3.99E-3	5.12E-3	4.25E-6	1.52E-4	1.00E-7	-7.23E-4	4.55E-3
ODP	kg CFC11 eq	5.17E-7	2.93E-9	4.44E-9	5.25E-7	2.77E-9	4.22E-8	1.42E-10	-2.62E-7	3.08E-7
AP	mol H+ eq	4.58E-3	7.69E-5	2.56E-4	4.91E-3	6.84E-5	7.17E-4	3.46E-6	-2.20E-3	3.50E-3
EP-fw	kg P eq	4.66E-5	1.34E-7	7.36E-7	4.74E-5	9.88E-8	5.09E-6	4.53E-9	-2.38E-5	2.89E-5
EP-m	kg N eq	8.28E-4	2.71E-5	6.05E-5	9.15E-4	2.45E-5	1.76E-4	2.14E-6	-3.95E-4	7.23E-4
EP-T	mol N eq	8.90E-3	2.99E-4	6.67E-4	9.86E-3	2.70E-4	1.94E-3	1.38E-5	-4.26E-3	7.82E-3
POCP	kg NMVOC eq	2.83E-3	8.53E-5	1.90E-4	3.11E-3	7.71E-5	5.80E-4	4.75E-6	-1.41E-3	2.36E-3
ADP-mm	kg Sb eq	9.45E-4	3.36E-7	1.47E-6	9.47E-4	3.11E-7	2.84E-6	3.47E-9	-1.09E-5	9.40E-4
ADP-f	MJ	2.37E+1	2.00E-1	4.70E-1	2.44E+1	1.84E-1	1.93E+0	1.04E-2	-1.29E+1	1.36E+1
WDP	m3 depriv.	1.57E+0	7.15E-4	3.64E-1	1.93E+0	5.65E-4	7.64E-2	6.73E-5	-8.21E-1	1.19E+0
PM	disease inc.	3.13E-8	1.19E-9	3.16E-9	3.56E-8	1.08E-9	8.88E-9	7.15E-11	-1.76E-8	2.81E-8
IR	kBq U-235 eq	5.44E-2	8.38E-4	7.47E-4	5.60E-2	8.05E-4	6.86E-3	4.77E-5	-2.73E-2	3.64E-2
ETP-fw	CTUe	3.02E+1	1.78E-1	1.09E+0	3.15E+1	1.50E-1	1.50E+1	1.66E-1	-1.14E+1	3.55E+1
HTP-c	CTUh	7.92E-10	5.78E-12	3.78E-11	8.35E-10	5.32E-12	2.15E-10	2.87E-13	-3.04E-10	7.52E-10
HTP-nc	CTUh	2.62E-8	1.95E-10	1.18E-9	2.75E-8	1.78E-10	5.20E-9	3.18E-11	-1.05E-8	2.24E-8
SQP	Pt	5.33E+0	1.73E-1	3.51E-2	5.53E+0	1.58E-1	1.18E+0	2.66E-2	-1.14E+1	-4.49E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.64E+0	2.50E-3	2.28E+0	3.93E+0	2.64E-3	1.40E-1	3.88E-4	-2.36E+0	1.71E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.64E+0	2.50E-3	2.28E+0	3.93E+0	2.64E-3	1.40E-1	3.88E-4	-2.36E+0	1.71E+0
PENRE	MJ	2.54E+1	2.12E-1	5.08E-1	2.62E+1	1.96E-1	2.06E+0	1.10E-2	-1.39E+1	1.45E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.54E+1	2.12E-1	5.08E-1	2.62E+1	1.96E-1	2.06E+0	1.10E-2	-1.39E+1	1.45E+1
PET	MJ	2.71E+1	2.15E-1	2.79E+0	3.01E+1	1.98E-1	2.20E+0	1.14E-2	-1.62E+1	1.63E+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	1.77E-2	2.44E-5	8.59E-3	2.63E-2	2.09E-5	2.09E-3	1.27E-5	-9.81E-3	1.86E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.36E-4	5.07E-7	4.99E-7	1.37E-4	4.71E-7	3.17E-6	1.26E-8	-1.10E-5	1.30E-4
NHWD	kg	1.00E-1	1.27E-2	7.70E-4	1.14E-1	1.14E-2	6.97E-2	4.57E-2	-4.38E-2	1.97E-1
RWD	kg	4.74E-5	1.31E-6	9.25E-7	4.96E-5	1.25E-6	7.36E-6	6.75E-8	-2.43E-5	3.40E-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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