

Environmental Profile

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

Ecochain v3.5.80



Product: 3003182 - Wadal PVC Tee 88° GY 125 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	0.13	0	0.01	0.14	0	0.04	0	-0.06	0.11
ADPE	kg Sb-eq	1.14E-3	4.00E-7	1.77E-6	1.15E-3	3.76E-7	3.41E-6	4.20E-9	-1.31E-5	1.14E-3
ADPF	kg Sb-eq	1.34E-2	1.15E-4	3.05E-4	1.38E-2	1.06E-4	1.18E-3	5.81E-6	-7.34E-3	7.74E-3
GWP	kg CO2-eq	1.12E+0	1.56E-2	5.78E-2	1.19E+0	1.44E-2	4.01E-1	3.96E-3	-6.30E-1	9.84E-1
ODP	kg CFC-11-eq	6.33E-7	2.78E-9	4.57E-9	6.41E-7	2.67E-9	4.95E-8	1.39E-10	-3.19E-7	3.73E-7
POCP	kg ethene-eq	6.41E-4	9.44E-6	2.51E-5	6.76E-4	8.65E-6	9.29E-5	1.03E-6	-3.27E-4	4.52E-4
AP	kg SO2-eq	4.49E-3	6.88E-5	2.49E-4	4.81E-3	6.20E-5	6.87E-4	3.13E-6	-2.15E-3	3.41E-3
EP	kg PO4 3--eq	5.77E-4	1.35E-5	3.20E-5	6.22E-4	1.24E-5	1.04E-4	1.23E-6	-2.89E-4	4.50E-4
HTP	kg 1,4-DB-eq	4.38E-1	6.59E-3	2.69E-2	4.72E-1	6.17E-3	1.79E-1	3.29E-4	-2.05E-1	4.52E-1
FAETP	kg 1,4-DB-eq	1.32E-2	1.92E-4	9.18E-4	1.43E-2	1.81E-4	2.72E-3	1.01E-4	-5.71E-3	1.16E-2
MAETP	kg 1,4-DB-eq	3.10E+1	6.92E-1	3.62E+0	3.53E+1	6.45E-1	9.37E+0	1.24E-1	-1.33E+1	3.21E+1
TETP	kg 1,4-DB-eq	3.25E-3	2.33E-5	2.00E-3	5.27E-3	2.18E-5	6.38E-4	1.11E-6	-1.91E-3	4.02E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.16E+0	1.58E-2	6.62E-2	1.24E+0	1.45E-2	4.28E-1	4.61E-3	-5.94E-1	1.09E+0
GWP-f	kg CO2 eq	1.15E+0	1.58E-2	5.09E-2	1.21E+0	1.45E-2	4.04E-1	4.61E-3	-6.43E-1	9.93E-1
GWP-b	kg CO2 eq	1.15E-2	7.28E-6	1.05E-2	2.20E-2	8.82E-6	2.33E-2	5.83E-6	4.98E-2	9.51E-2
GWP-luluc	kg CO2 eq	1.28E-3	5.78E-6	4.83E-3	6.12E-3	5.14E-6	1.84E-4	1.21E-7	-7.79E-4	5.53E-3
ODP	kg CFC11 eq	6.25E-7	3.48E-9	5.38E-9	6.34E-7	3.35E-9	5.09E-8	1.72E-10	-3.16E-7	3.72E-7
AP	mol H+ eq	5.47E-3	9.15E-5	3.10E-4	5.87E-3	8.28E-5	8.62E-4	4.19E-6	-2.60E-3	4.22E-3
EP-fw	kg P eq	5.55E-5	1.59E-7	8.91E-7	5.66E-5	1.20E-7	6.15E-6	5.48E-9	-2.76E-5	3.52E-5
EP-m	kg N eq	9.78E-4	3.22E-5	7.33E-5	1.08E-3	2.96E-5	2.10E-4	2.60E-6	-4.64E-4	8.63E-4
EP-T	mol N eq	1.05E-2	3.56E-4	8.08E-4	1.17E-2	3.26E-4	2.32E-3	1.67E-5	-4.98E-3	9.38E-3
POCP	kg NMVOC eq	3.38E-3	1.02E-4	2.30E-4	3.71E-3	9.33E-5	6.93E-4	5.75E-6	-1.66E-3	2.84E-3
ADP-mm	kg Sb eq	1.14E-3	4.00E-7	1.77E-6	1.15E-3	3.76E-7	3.41E-6	4.20E-9	-1.31E-5	1.14E-3
ADP-f	MJ	2.85E+1	2.38E-1	5.69E-1	2.93E+1	2.23E-1	2.33E+0	1.26E-2	-1.55E+1	1.64E+1
WDP	m3 depriv.	1.89E+0	8.51E-4	4.40E-1	2.33E+0	6.84E-4	9.24E-2	8.15E-5	-9.73E-1	1.45E+0
PM	disease inc.	3.68E-8	1.42E-9	3.83E-9	4.21E-8	1.31E-9	1.06E-8	8.65E-11	-1.99E-8	3.42E-8
IR	kBq U-235 eq	6.53E-2	9.97E-4	9.04E-4	6.72E-2	9.75E-4	8.24E-3	5.78E-5	-3.22E-2	4.43E-2
ETP-fw	CTUe	3.49E+1	2.12E-1	1.32E+0	3.64E+1	1.81E-1	1.82E+1	2.01E-1	-1.27E+1	4.23E+1
HTP-c	CTUh	9.51E-10	6.88E-12	4.57E-11	1.00E-9	6.45E-12	2.58E-10	3.47E-13	-3.59E-10	9.10E-10
HTP-nc	CTUh	3.15E-8	2.32E-10	1.43E-9	3.31E-8	2.16E-10	6.28E-9	3.85E-11	-1.24E-8	2.72E-8
SQP	Pt	5.89E+0	2.06E-1	4.25E-2	6.14E+0	1.91E-1	1.42E+0	3.22E-2	-1.13E+1	-3.52E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.88E+0	2.98E-3	2.76E+0	4.64E+0	3.20E-3	1.69E-1	4.69E-4	-2.41E+0	2.40E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.88E+0	2.98E-3	2.76E+0	4.64E+0	3.20E-3	1.69E-1	4.69E-4	-2.41E+0	2.40E+0
PENRE	MJ	3.06E+1	2.53E-1	6.15E-1	3.14E+1	2.37E-1	2.48E+0	1.33E-2	-1.66E+1	1.75E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.06E+1	2.53E-1	6.15E-1	3.14E+1	2.37E-1	2.48E+0	1.33E-2	-1.66E+1	1.75E+1
PET	MJ	3.25E+1	2.56E-1	3.38E+0	3.61E+1	2.40E-1	2.64E+0	1.38E-2	-1.91E+1	1.99E+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	2.12E-2	2.90E-5	1.04E-2	3.16E-2	2.52E-5	2.53E-3	1.54E-5	-1.14E-2	2.28E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.64E-4	6.03E-7	6.04E-7	1.66E-4	5.70E-7	3.80E-6	1.53E-8	-1.31E-5	1.57E-4
NHWD	kg	1.19E-1	1.51E-2	9.32E-4	1.35E-1	1.38E-2	8.38E-2	5.53E-2	-5.19E-2	2.36E-1
RWD	kg	5.67E-5	1.56E-6	1.12E-6	5.94E-5	1.52E-6	8.82E-6	8.18E-8	-2.86E-5	4.12E-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