

Environmental Profile

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

Ecochain v3.5.80



Product: 3003179 - Wadal PVC Tee 45° GY 110x75 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	0.12	0	0.04	0	-0.06	0.1
ADPE	kg Sb-eq	9.87E-4	3.42E-7	1.53E-6	9.89E-4	3.24E-7	2.93E-6	3.62E-9	-1.12E-5	9.81E-4
ADPF	kg Sb-eq	1.15E-2	9.83E-5	2.63E-4	1.19E-2	9.13E-5	1.01E-3	5.01E-6	-6.31E-3	6.66E-3
GWP	kg CO2-eq	9.60E-1	1.34E-2	4.99E-2	1.02E+0	1.24E-2	3.46E-1	3.41E-3	-5.39E-1	8.46E-1
ODP	kg CFC-11-eq	5.45E-7	2.37E-9	3.94E-9	5.52E-7	2.30E-9	4.26E-8	1.20E-10	-2.75E-7	3.22E-7
POCP	kg ethene-eq	5.50E-4	8.07E-6	2.17E-5	5.80E-4	7.46E-6	7.97E-5	8.85E-7	-2.79E-4	3.89E-4
AP	kg SO2-eq	3.85E-3	5.88E-5	2.14E-4	4.13E-3	5.35E-5	5.90E-4	2.70E-6	-1.83E-3	2.94E-3
EP	kg PO4 3--eq	4.90E-4	1.15E-5	2.76E-5	5.30E-4	1.07E-5	8.92E-5	1.06E-6	-2.43E-4	3.88E-4
HTP	kg 1,4-DB-eq	3.76E-1	5.63E-3	2.32E-2	4.05E-1	5.32E-3	1.54E-1	2.83E-4	-1.75E-1	3.89E-1
FAETP	kg 1,4-DB-eq	1.12E-2	1.64E-4	7.91E-4	1.21E-2	1.56E-4	2.33E-3	8.73E-5	-4.74E-3	9.95E-3
MAETP	kg 1,4-DB-eq	2.65E+1	5.91E-1	3.12E+0	3.03E+1	5.56E-1	8.01E+0	1.07E-1	-1.13E+1	2.76E+1
TETP	kg 1,4-DB-eq	2.77E-3	1.99E-5	1.72E-3	4.52E-3	1.88E-5	5.49E-4	9.53E-7	-1.58E-3	3.50E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.93E-1	1.35E-2	5.71E-2	1.06E+0	1.25E-2	3.65E-1	3.98E-3	-5.15E-1	9.31E-1
GWP-f	kg CO2 eq	9.83E-1	1.35E-2	4.39E-2	1.04E+0	1.25E-2	3.48E-1	3.98E-3	-5.51E-1	8.53E-1
GWP-b	kg CO2 eq	9.78E-3	6.22E-6	9.05E-3	1.88E-2	7.61E-6	1.72E-2	5.03E-6	3.65E-2	7.26E-2
GWP-luluc	kg CO2 eq	1.07E-3	4.94E-6	4.16E-3	5.24E-3	4.43E-6	1.58E-4	1.04E-7	-6.27E-4	4.78E-3
ODP	kg CFC11 eq	5.38E-7	2.98E-9	4.64E-9	5.46E-7	2.89E-9	4.38E-8	1.48E-10	-2.72E-7	3.20E-7
AP	mol H+ eq	4.68E-3	7.82E-5	2.67E-4	5.03E-3	7.14E-5	7.40E-4	3.61E-6	-2.21E-3	3.63E-3
EP-fw	kg P eq	4.75E-5	1.36E-7	7.68E-7	4.84E-5	1.03E-7	5.30E-6	4.72E-9	-2.32E-5	3.05E-5
EP-m	kg N eq	8.33E-4	2.76E-5	6.32E-5	9.24E-4	2.55E-5	1.80E-4	2.24E-6	-3.93E-4	7.39E-4
EP-T	mol N eq	8.99E-3	3.04E-4	6.97E-4	9.99E-3	2.81E-4	1.99E-3	1.44E-5	-4.22E-3	8.05E-3
POCP	kg NMVOC eq	2.89E-3	8.67E-5	1.98E-4	3.17E-3	8.05E-5	5.94E-4	4.95E-6	-1.41E-3	2.44E-3
ADP-mm	kg Sb eq	9.87E-4	3.42E-7	1.53E-6	9.89E-4	3.24E-7	2.93E-6	3.62E-9	-1.12E-5	9.81E-4
ADP-f	MJ	2.45E+1	2.03E-1	4.90E-1	2.52E+1	1.92E-1	2.00E+0	1.08E-2	-1.33E+1	1.41E+1
WDP	m3 depriv.	1.63E+0	7.27E-4	3.79E-1	2.01E+0	5.90E-4	7.97E-2	7.02E-5	-8.30E-1	1.26E+0
PM	disease inc.	3.13E-8	1.21E-9	3.30E-9	3.58E-8	1.13E-9	9.13E-9	7.46E-11	-1.66E-8	2.95E-8
IR	kBq U-235 eq	5.60E-2	8.52E-4	7.79E-4	5.77E-2	8.41E-4	7.08E-3	4.98E-5	-2.74E-2	3.83E-2
ETP-fw	CTUe	2.93E+1	1.81E-1	1.14E+0	3.06E+1	1.56E-1	1.57E+1	1.73E-1	-1.05E+1	3.61E+1
HTP-c	CTUh	8.17E-10	5.88E-12	3.94E-11	8.63E-10	5.56E-12	2.22E-10	2.99E-13	-3.06E-10	7.84E-10
HTP-nc	CTUh	2.70E-8	1.98E-10	1.23E-9	2.85E-8	1.86E-10	5.40E-9	3.32E-11	-1.06E-8	2.35E-8
SQP	Pt	4.82E+0	1.76E-1	3.67E-2	5.04E+0	1.65E-1	1.22E+0	2.78E-2	-8.59E+0	-2.14E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.56E+0	2.55E-3	2.38E+0	3.95E+0	2.76E-3	1.45E-1	4.05E-4	-1.87E+0	2.23E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.56E+0	2.55E-3	2.38E+0	3.95E+0	2.76E-3	1.45E-1	4.05E-4	-1.87E+0	2.23E+0
PENRE	MJ	2.63E+1	2.16E-1	5.30E-1	2.70E+1	2.04E-1	2.13E+0	1.15E-2	-1.43E+1	1.51E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.63E+1	2.16E-1	5.30E-1	2.70E+1	2.04E-1	2.13E+0	1.15E-2	-1.43E+1	1.51E+1
PET	MJ	2.78E+1	2.18E-1	2.91E+0	3.10E+1	2.07E-1	2.27E+0	1.19E-2	-1.62E+1	1.73E+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	1.82E-2	2.48E-5	8.97E-3	2.72E-2	2.18E-5	2.18E-3	1.33E-5	-9.56E-3	1.98E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.42E-4	5.15E-7	5.21E-7	1.43E-4	4.92E-7	3.26E-6	1.32E-8	-1.12E-5	1.35E-4
NHWD	kg	1.02E-1	1.29E-2	8.04E-4	1.15E-1	1.19E-2	7.20E-2	4.77E-2	-4.43E-2	2.03E-1
RWD	kg	4.86E-5	1.34E-6	9.65E-7	5.09E-5	1.31E-6	7.57E-6	7.05E-8	-2.43E-5	3.56E-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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