

Environmental Profile

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

Ecochain v3.5.80



Product: 3003167 - Wadal PVC Tee 45° GY 75x40 S/S/S
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]

Statement of Confidentiality

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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	0.05	0	0.02	0	-0.02	0.04
ADPE	kg Sb-eq	4.15E-4	1.46E-7	6.23E-7	4.15E-4	1.36E-7	1.24E-6	1.52E-9	-4.75E-6	4.12E-4
ADPF	kg Sb-eq	4.87E-3	4.21E-5	1.07E-4	5.02E-3	3.83E-5	4.28E-4	2.11E-6	-2.67E-3	2.81E-3
GWP	kg CO2-eq	4.09E-1	5.72E-3	2.03E-2	4.35E-1	5.22E-3	1.46E-1	1.43E-3	-2.30E-1	3.57E-1
ODP	kg CFC-11-eq	2.30E-7	1.02E-9	1.61E-9	2.32E-7	9.68E-10	1.79E-8	5.02E-11	-1.16E-7	1.35E-7
POCP	kg ethene-eq	2.34E-4	3.45E-6	8.83E-6	2.46E-4	3.13E-6	3.39E-5	3.72E-7	-1.20E-4	1.64E-4
AP	kg SO2-eq	1.64E-3	2.52E-5	8.74E-5	1.75E-3	2.25E-5	2.50E-4	1.13E-6	-7.89E-4	1.24E-3
EP	kg PO4 3--eq	2.12E-4	4.94E-6	1.12E-5	2.28E-4	4.49E-6	3.79E-5	4.47E-7	-1.08E-4	1.63E-4
HTP	kg 1,4-DB-eq	1.60E-1	2.41E-3	9.45E-3	1.71E-1	2.23E-3	6.50E-2	1.19E-4	-7.51E-2	1.64E-1
FAETP	kg 1,4-DB-eq	4.89E-3	7.04E-5	3.23E-4	5.28E-3	6.54E-5	9.90E-4	3.67E-5	-2.15E-3	4.23E-3
MAETP	kg 1,4-DB-eq	1.13E+1	2.53E-1	1.27E+0	1.28E+1	2.34E-1	3.42E+0	4.48E-2	-4.86E+0	1.17E+1
TETP	kg 1,4-DB-eq	1.19E-3	8.52E-6	7.02E-4	1.90E-3	7.91E-6	2.31E-4	4.01E-7	-7.19E-4	1.42E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.23E-1	5.78E-3	2.33E-2	4.52E-1	5.27E-3	1.57E-1	1.67E-3	-2.14E-1	4.01E-1
GWP-f	kg CO2 eq	4.18E-1	5.77E-3	1.79E-2	4.42E-1	5.26E-3	1.47E-1	1.67E-3	-2.35E-1	3.61E-1
GWP-b	kg CO2 eq	4.19E-3	2.66E-6	3.69E-3	7.88E-3	3.20E-6	9.67E-3	2.11E-6	2.09E-2	3.85E-2
GWP-luluc	kg CO2 eq	4.81E-4	2.12E-6	1.70E-3	2.18E-3	1.86E-6	6.66E-5	4.39E-8	-3.02E-4	1.95E-3
ODP	kg CFC11 eq	2.27E-7	1.27E-9	1.89E-9	2.30E-7	1.21E-9	1.85E-8	6.23E-11	-1.15E-7	1.35E-7
AP	mol H+ eq	2.00E-3	3.35E-5	1.09E-4	2.14E-3	3.00E-5	3.14E-4	1.52E-6	-9.55E-4	1.53E-3
EP-fw	kg P eq	2.03E-5	5.82E-8	3.13E-7	2.07E-5	4.33E-8	2.23E-6	1.98E-9	-1.02E-5	1.27E-5
EP-m	kg N eq	3.59E-4	1.18E-5	2.57E-5	3.97E-4	1.07E-5	7.67E-5	9.40E-7	-1.71E-4	3.14E-4
EP-T	mol N eq	3.87E-3	1.30E-4	2.84E-4	4.28E-3	1.18E-4	8.45E-4	6.05E-6	-1.84E-3	3.41E-3
POCP	kg NMVOC eq	1.23E-3	3.71E-5	8.08E-5	1.35E-3	3.38E-5	2.53E-4	2.08E-6	-6.11E-4	1.03E-3
ADP-mm	kg Sb eq	4.15E-4	1.46E-7	6.23E-7	4.15E-4	1.36E-7	1.24E-6	1.52E-9	-4.75E-6	4.12E-4
ADP-f	MJ	1.04E+1	8.71E-2	2.00E-1	1.07E+1	8.08E-2	8.46E-1	4.55E-3	-5.63E+0	5.96E+0
WDP	m3 depriv.	6.87E-1	3.11E-4	1.55E-1	8.42E-1	2.48E-4	3.35E-2	2.95E-5	-3.57E-1	5.19E-1
PM	disease inc.	1.36E-8	5.18E-10	1.35E-9	1.54E-8	4.75E-10	3.88E-9	3.14E-11	-7.49E-9	1.23E-8
IR	kBq U-235 eq	2.38E-2	3.65E-4	3.18E-4	2.45E-2	3.53E-4	3.00E-3	2.09E-5	-1.18E-2	1.60E-2
ETP-fw	CTUe	1.30E+1	7.76E-2	4.64E-1	1.35E+1	6.56E-2	6.59E+0	7.27E-2	-4.82E+0	1.54E+1
HTP-c	CTUh	3.46E-10	2.52E-12	1.61E-11	3.65E-10	2.34E-12	9.41E-11	1.26E-13	-1.32E-10	3.29E-10
HTP-nc	CTUh	1.14E-8	8.49E-11	5.02E-10	1.20E-8	7.82E-11	2.28E-9	1.39E-11	-4.56E-9	9.83E-9
SQP	Pt	2.25E+0	7.55E-2	1.49E-2	2.34E+0	6.91E-2	5.15E-1	1.17E-2	-4.60E+0	-1.67E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.03E-1	1.09E-3	9.72E-1	1.68E+0	1.16E-3	6.12E-2	1.70E-4	-9.66E-1	7.73E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.03E-1	1.09E-3	9.72E-1	1.68E+0	1.16E-3	6.12E-2	1.70E-4	-9.66E-1	7.73E-1
PENRE	MJ	1.11E+1	9.24E-2	2.16E-1	1.14E+1	8.58E-2	9.00E-1	4.83E-3	-6.06E+0	6.36E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.11E+1	9.24E-2	2.16E-1	1.14E+1	8.58E-2	9.00E-1	4.83E-3	-6.06E+0	6.36E+0
PET	MJ	1.18E+1	9.35E-2	1.19E+0	1.31E+1	8.70E-2	9.61E-1	5.00E-3	-7.03E+0	7.13E+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	7.72E-3	1.06E-5	3.66E-3	1.14E-2	9.14E-6	9.18E-4	5.58E-6	-4.22E-3	8.09E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.96E-5	2.21E-7	2.12E-7	6.01E-5	2.07E-7	1.38E-6	5.55E-9	-4.78E-6	5.69E-5
NHWD	kg	4.37E-2	5.52E-3	3.28E-4	4.95E-2	5.01E-3	3.05E-2	2.00E-2	-1.90E-2	8.60E-2
RWD	kg	2.07E-5	5.72E-7	3.93E-7	2.16E-5	5.50E-7	3.21E-6	2.96E-8	-1.05E-5	1.49E-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