

Environmental Profile

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

Ecochain v3.5.80



Product: 3003154 - Wadal PVC Tee 88° GY 75 S/S/SP
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	0.06	0	0.02	0	-0.03	0.05
ADPE	kg Sb-eq	4.77E-4	1.69E-7	7.39E-7	4.78E-4	1.57E-7	1.43E-6	1.75E-9	-5.48E-6	4.74E-4
ADPF	kg Sb-eq	5.61E-3	4.87E-5	1.27E-4	5.79E-3	4.41E-5	4.93E-4	2.42E-6	-3.08E-3	3.25E-3
GWP	kg CO2-eq	4.72E-1	6.63E-3	2.41E-2	5.03E-1	6.01E-3	1.68E-1	1.65E-3	-2.65E-1	4.13E-1
ODP	kg CFC-11-eq	2.64E-7	1.18E-9	1.91E-9	2.68E-7	1.11E-9	2.07E-8	5.77E-11	-1.34E-7	1.56E-7
POCP	kg ethene-eq	2.70E-4	4.00E-6	1.05E-5	2.84E-4	3.60E-6	3.91E-5	4.28E-7	-1.39E-4	1.89E-4
AP	kg SO2-eq	1.89E-3	2.91E-5	1.04E-4	2.02E-3	2.58E-5	2.88E-4	1.30E-6	-9.15E-4	1.42E-3
EP	kg PO4 3--eq	2.46E-4	5.72E-6	1.33E-5	2.65E-4	5.16E-6	4.38E-5	5.14E-7	-1.26E-4	1.88E-4
HTP	kg 1,4-DB-eq	1.84E-1	2.79E-3	1.12E-2	1.98E-1	2.57E-3	7.49E-2	1.37E-4	-8.70E-2	1.89E-1
FAETP	kg 1,4-DB-eq	5.71E-3	8.14E-5	3.82E-4	6.17E-3	7.53E-5	1.14E-3	4.22E-5	-2.54E-3	4.89E-3
MAETP	kg 1,4-DB-eq	1.30E+1	2.93E-1	1.51E+0	1.48E+1	2.69E-1	3.96E+0	5.16E-2	-5.64E+0	1.35E+1
TETP	kg 1,4-DB-eq	1.37E-3	9.86E-6	8.32E-4	2.22E-3	9.10E-6	2.66E-4	4.61E-7	-8.48E-4	1.64E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.88E-1	6.69E-3	2.76E-2	5.22E-1	6.06E-3	1.81E-1	1.92E-3	-2.45E-1	4.66E-1
GWP-f	kg CO2 eq	4.83E-1	6.68E-3	2.12E-2	5.11E-1	6.05E-3	1.69E-1	1.92E-3	-2.71E-1	4.16E-1
GWP-b	kg CO2 eq	4.85E-3	3.08E-6	4.37E-3	9.23E-3	3.68E-6	1.21E-2	2.43E-6	2.63E-2	4.76E-2
GWP-luluc	kg CO2 eq	5.66E-4	2.45E-6	2.01E-3	2.58E-3	2.14E-6	7.66E-5	5.04E-8	-3.63E-4	2.30E-3
ODP	kg CFC11 eq	2.61E-7	1.47E-9	2.24E-9	2.65E-7	1.40E-9	2.13E-8	7.17E-11	-1.32E-7	1.55E-7
AP	mol H+ eq	2.31E-3	3.88E-5	1.29E-4	2.47E-3	3.45E-5	3.62E-4	1.74E-6	-1.11E-3	1.76E-3
EP-fw	kg P eq	2.35E-5	6.74E-8	3.71E-7	2.39E-5	4.98E-8	2.57E-6	2.28E-9	-1.20E-5	1.46E-5
EP-m	kg N eq	4.17E-4	1.37E-5	3.05E-5	4.61E-4	1.23E-5	8.86E-5	1.08E-6	-1.99E-4	3.64E-4
EP-T	mol N eq	4.48E-3	1.51E-4	3.37E-4	4.97E-3	1.36E-4	9.77E-4	6.96E-6	-2.15E-3	3.94E-3
POCP	kg NMVOC eq	1.43E-3	4.30E-5	9.58E-5	1.57E-3	3.89E-5	2.92E-4	2.39E-6	-7.10E-4	1.19E-3
ADP-mm	kg Sb eq	4.77E-4	1.69E-7	7.39E-7	4.78E-4	1.57E-7	1.43E-6	1.75E-9	-5.48E-6	4.74E-4
ADP-f	MJ	1.20E+1	1.01E-1	2.37E-1	1.23E+1	9.29E-2	9.75E-1	5.24E-3	-6.50E+0	6.87E+0
WDP	m3 depriv.	7.91E-1	3.61E-4	1.83E-1	9.74E-1	2.85E-4	3.86E-2	3.39E-5	-4.14E-1	6.00E-1
PM	disease inc.	1.58E-8	6.00E-10	1.60E-9	1.80E-8	5.47E-10	4.48E-9	3.61E-11	-8.83E-9	1.42E-8
IR	kBq U-235 eq	2.74E-2	4.22E-4	3.77E-4	2.82E-2	4.06E-4	3.46E-3	2.41E-5	-1.38E-2	1.84E-2
ETP-fw	CTUe	1.52E+1	8.99E-2	5.50E-1	1.59E+1	7.55E-2	7.58E+0	8.36E-2	-5.71E+0	1.79E+1
HTP-c	CTUh	3.99E-10	2.91E-12	1.90E-11	4.21E-10	2.69E-12	1.08E-10	1.45E-13	-1.53E-10	3.79E-10
HTP-nc	CTUh	1.32E-8	9.83E-11	5.95E-10	1.39E-8	9.00E-11	2.62E-9	1.60E-11	-5.29E-9	1.13E-8
SQP	Pt	2.68E+0	8.74E-2	1.77E-2	2.78E+0	7.95E-2	5.94E-1	1.34E-2	-5.70E+0	-2.23E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.28E-1	1.26E-3	1.15E+0	1.98E+0	1.33E-3	7.04E-2	1.96E-4	-1.18E+0	8.69E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.28E-1	1.26E-3	1.15E+0	1.98E+0	1.33E-3	7.04E-2	1.96E-4	-1.18E+0	8.69E-1
PENRE	MJ	1.28E+1	1.07E-1	2.56E-1	1.32E+1	9.87E-2	1.04E+0	5.56E-3	-6.99E+0	7.34E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.28E+1	1.07E-1	2.56E-1	1.32E+1	9.87E-2	1.04E+0	5.56E-3	-6.99E+0	7.34E+0
PET	MJ	1.37E+1	1.08E-1	1.41E+0	1.52E+1	1.00E-1	1.11E+0	5.75E-3	-8.18E+0	8.21E+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	8.90E-3	1.23E-5	4.33E-3	1.32E-2	1.05E-5	1.06E-3	6.42E-6	-4.94E-3	9.38E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.86E-5	2.55E-7	2.52E-7	6.91E-5	2.38E-7	1.60E-6	6.38E-9	-5.52E-6	6.54E-5
NHWD	kg	5.06E-2	6.39E-3	3.88E-4	5.74E-2	5.76E-3	3.51E-2	2.30E-2	-2.21E-2	9.93E-2
RWD	kg	2.39E-5	6.62E-7	4.66E-7	2.50E-5	6.32E-7	3.71E-6	3.41E-8	-1.22E-5	1.71E-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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