

Environmental Profile

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

Ecochain v3.5.80



Product: 3003115 - Wadal PVC Bend 88° GY 75 S/SP
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

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: EN15804+A2 (2019)
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 - PL -Buk - Extra products (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

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	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.94E-1	5.62E-3	1.45E-4	4.00E-1	5.16E-3	2.33E-1	1.64E-3	-2.27E-1	4.12E-1
GWP-f	kg CO2 eq	4.55E-1	5.61E-3	1.46E-4	4.61E-1	5.15E-3	1.57E-1	1.64E-3	-2.46E-1	3.79E-1
GWP-b	kg CO2 eq	-6.20E-2	3.41E-6	-1.54E-6	-6.20E-2	3.13E-6	7.56E-2	2.07E-6	1.93E-2	3.29E-2
GWP-luluc	kg CO2 eq	5.21E-4	1.99E-6	1.49E-7	5.23E-4	1.82E-6	6.53E-5	4.32E-8	-3.20E-4	2.70E-4
ODP	kg CFC11 eq	2.25E-7	1.29E-9	8.26E-12	2.26E-7	1.19E-9	1.81E-8	6.11E-11	-1.14E-7	1.32E-7
AP	mol H+ eq	2.19E-3	3.20E-5	1.47E-6	2.22E-3	2.94E-5	3.11E-4	1.49E-6	-9.96E-4	1.57E-3
EP-fw	kg P eq	2.12E-5	4.62E-8	8.24E-9	2.13E-5	4.24E-8	2.19E-6	1.95E-9	-1.04E-5	1.31E-5
EP-m	kg N eq	3.95E-4	1.14E-5	1.55E-7	4.06E-4	1.05E-5	7.68E-5	9.19E-7	-1.84E-4	3.10E-4
EP-T	mol N eq	4.28E-3	1.26E-4	1.85E-6	4.41E-3	1.16E-4	8.46E-4	5.93E-6	-2.00E-3	3.38E-3
POCP	kg NMVOC eq	1.40E-3	3.61E-5	6.28E-7	1.43E-3	3.31E-5	2.53E-4	2.04E-6	-6.71E-4	1.05E-3
ADP-mm	kg Sb eq	3.97E-4	1.45E-7	1.97E-8	3.97E-4	1.33E-7	1.22E-6	1.49E-9	-4.80E-6	3.94E-4
ADP-f	MJ	1.10E+1	8.62E-2	1.36E-3	1.11E+1	7.91E-2	8.34E-1	4.46E-3	-5.80E+0	6.18E+0
WDP	m3 depriv.	6.88E-1	2.64E-4	5.22E-5	6.89E-1	2.43E-4	3.28E-2	2.98E-5	-3.51E-1	3.71E-1
PM	disease inc.	1.60E-8	5.07E-10	9.08E-12	1.65E-8	4.65E-10	3.84E-9	3.07E-11	-8.45E-9	1.24E-8
IR	kBq U-235 eq	2.45E-2	3.77E-4	1.02E-6	2.49E-2	3.46E-4	2.96E-3	2.05E-5	-1.20E-2	1.62E-2
ETP-fw	CTUe	1.36E+1	7.00E-2	1.21E-2	1.37E+1	6.43E-2	6.43E+0	7.09E-2	-4.90E+0	1.54E+1
HTP-c	CTUh	4.05E-10	2.49E-12	6.17E-13	4.08E-10	2.29E-12	9.51E-11	1.24E-13	-1.53E-10	3.52E-10
HTP-nc	CTUh	1.23E-8	8.34E-11	1.57E-11	1.24E-8	7.66E-11	2.25E-9	1.36E-11	-4.66E-9	1.01E-8
SQP	Pt	7.93E+0	7.37E-2	2.24E-3	8.01E+0	6.77E-2	5.10E-1	1.14E-2	-8.98E+0	-3.82E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.63E+0	1.24E-3	2.40E-2	2.65E+0	1.14E-3	6.00E-2	1.66E-4	-1.61E+0	1.11E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.63E+0	1.24E-3	2.40E-2	2.65E+0	1.14E-3	6.00E-2	1.66E-4	-1.61E+0	1.11E+0
PENRE	MJ	1.18E+1	9.15E-2	1.44E-3	1.19E+1	8.40E-2	8.87E-1	4.73E-3	-6.25E+0	6.59E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.18E+1	9.15E-2	1.44E-3	1.19E+1	8.40E-2	8.87E-1	4.73E-3	-6.25E+0	6.59E+0
PET	MJ	1.44E+1	9.27E-2	2.55E-2	1.45E+1	8.51E-2	9.47E-1	4.90E-3	-7.86E+0	7.70E+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	8.00E-3	9.75E-6	1.46E-6	8.01E-3	8.96E-6	9.01E-4	5.46E-6	-4.18E-3	4.74E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.79E-5	2.20E-7	2.73E-13	5.81E-5	2.02E-7	1.37E-6	5.44E-9	-5.19E-6	5.45E-5
NHWD	kg	4.84E-2	5.34E-3	1.05E-6	5.38E-2	4.90E-3	3.08E-2	1.96E-2	-2.12E-2	8.79E-2
RWD	kg	2.16E-5	5.86E-7	1.10E-13	2.22E-5	5.38E-7	3.18E-6	2.90E-8	-1.08E-5	1.52E-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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