

Environmental Profile

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

Ecochain v3.5.80



Product: 3080522 - Wadal PVC Bend 88° WT 40 S/S
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	1.35E-1	6.33E-5	1.45E-4	1.35E-1	1.79E-3	9.79E-2	5.59E-4	-8.71E-2	1.48E-1
GWP-f	kg CO2 eq	1.67E-1	6.32E-5	1.46E-4	1.67E-1	1.79E-3	6.28E-2	5.58E-4	-9.07E-2	1.41E-1
GWP-b	kg CO2 eq	-3.22E-2	3.84E-8	-1.54E-6	-3.22E-2	1.08E-6	3.51E-2	7.21E-7	3.63E-3	6.56E-3
GWP-luluc	kg CO2 eq	1.62E-4	2.24E-8	1.49E-7	1.62E-4	6.32E-7	2.31E-5	1.43E-8	-9.47E-5	9.08E-5
ODP	kg CFC11 eq	8.07E-8	1.46E-11	8.26E-12	8.07E-8	4.12E-10	6.46E-9	2.11E-11	-4.01E-8	4.76E-8
AP	mol H+ eq	7.61E-4	3.60E-7	1.47E-6	7.63E-4	1.02E-5	1.10E-4	5.11E-7	-3.44E-4	5.39E-4
EP-fw	kg P eq	7.14E-6	5.20E-10	8.24E-9	7.15E-6	1.47E-8	7.75E-7	6.54E-10	-3.40E-6	4.54E-6
EP-m	kg N eq	1.34E-4	1.29E-7	1.55E-7	1.35E-4	3.64E-6	2.72E-5	3.23E-7	-6.45E-5	1.01E-4
EP-T	mol N eq	1.45E-3	1.42E-6	1.85E-6	1.45E-3	4.01E-5	3.00E-4	2.04E-6	-6.99E-4	1.09E-3
POCP	kg NMVOC eq	5.06E-4	4.06E-7	6.28E-7	5.07E-4	1.15E-5	8.92E-5	7.02E-7	-2.39E-4	3.69E-4
ADP-mm	kg Sb eq	4.51E-6	1.64E-9	1.97E-8	4.53E-6	4.62E-8	4.28E-7	5.07E-10	-1.67E-6	3.33E-6
ADP-f	MJ	4.12E+0	9.70E-4	1.36E-3	4.12E+0	2.74E-2	2.93E-1	1.54E-3	-2.10E+0	2.34E+0
WDP	m3 depriv.	2.48E-1	2.98E-6	5.22E-5	2.48E-1	8.41E-5	1.17E-2	7.86E-6	-1.18E-1	1.42E-1
PM	disease inc.	5.77E-9	5.71E-12	9.08E-12	5.79E-9	1.61E-10	1.34E-9	1.06E-11	-2.84E-9	4.46E-9
IR	kBq U-235 eq	8.42E-3	4.24E-6	1.02E-6	8.42E-3	1.20E-4	1.04E-3	7.12E-6	-4.07E-3	5.52E-3
ETP-fw	CTUe	3.33E+0	7.88E-4	1.21E-2	3.34E+0	2.23E-2	2.31E+0	2.55E-2	-1.51E+0	4.18E+0
HTP-c	CTUh	1.19E-10	2.80E-14	6.17E-13	1.19E-10	7.92E-13	3.26E-11	4.11E-14	-5.53E-11	9.74E-11
HTP-nc	CTUh	3.54E-9	9.39E-13	1.57E-11	3.55E-9	2.65E-11	7.99E-10	4.85E-12	-1.59E-9	2.79E-9
SQP	Pt	3.49E+0	8.30E-4	2.24E-3	3.49E+0	2.35E-2	1.78E-1	3.96E-3	-3.28E+0	4.11E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.81E-1	1.39E-5	2.40E-2	1.01E+0	3.93E-4	2.13E-2	5.87E-5	-5.66E-1	4.61E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.81E-1	1.39E-5	2.40E-2	1.01E+0	3.93E-4	2.13E-2	5.87E-5	-5.66E-1	4.61E-1
PENRE	MJ	4.42E+0	1.03E-3	1.44E-3	4.42E+0	2.91E-2	3.11E-1	1.63E-3	-2.27E+0	2.49E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.42E+0	1.03E-3	1.44E-3	4.42E+0	2.91E-2	3.11E-1	1.63E-3	-2.27E+0	2.49E+0
PET	MJ	5.40E+0	1.04E-3	2.55E-2	5.42E+0	2.95E-2	3.33E-1	1.69E-3	-2.84E+0	2.95E+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	2.83E-3	1.10E-7	1.46E-6	2.83E-3	3.10E-6	3.22E-4	1.90E-6	-1.35E-3	1.80E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.27E-6	2.48E-9	2.73E-13	3.27E-6	7.01E-8	4.80E-7	1.86E-9	-1.93E-6	1.90E-6
NHWD	kg	1.69E-2	6.01E-5	1.05E-6	1.70E-2	1.70E-3	1.11E-2	6.79E-3	-7.55E-3	2.90E-2
RWD	kg	7.51E-6	6.60E-9	1.10E-13	7.52E-6	1.86E-7	1.11E-6	1.00E-8	-3.69E-6	5.14E-6
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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