

Environmental Profile

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

Ecochain v3.5.80



Product: 3080476 - Wadal PVC Bend 88° WT 32 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	8.19E-2	1.31E-4	1.45E-4	8.22E-2	1.13E-3	7.94E-2	3.54E-4	-5.97E-2	1.03E-1
GWP-f	kg CO2 eq	1.15E-1	1.31E-4	1.46E-4	1.15E-1	1.13E-3	4.46E-2	3.54E-4	-6.25E-2	9.84E-2
GWP-b	kg CO2 eq	-3.27E-2	7.94E-8	-1.54E-6	-3.27E-2	6.85E-7	3.47E-2	4.55E-7	2.91E-3	4.92E-3
GWP-luluc	kg CO2 eq	1.17E-4	4.63E-8	1.49E-7	1.17E-4	3.99E-7	1.46E-5	9.10E-9	-6.99E-5	6.23E-5
ODP	kg CFC11 eq	5.12E-8	3.01E-11	8.26E-12	5.13E-8	2.60E-10	4.10E-9	1.33E-11	-2.59E-8	2.98E-8
AP	mol H+ eq	5.27E-4	7.45E-7	1.47E-6	5.29E-4	6.43E-6	7.09E-5	3.23E-7	-2.35E-4	3.72E-4
EP-fw	kg P eq	4.85E-6	1.08E-9	8.24E-9	4.86E-6	9.28E-9	4.91E-7	4.16E-10	-2.30E-6	3.06E-6
EP-m	kg N eq	9.48E-5	2.66E-7	1.55E-7	9.52E-5	2.30E-6	1.78E-5	2.03E-7	-4.53E-5	7.02E-5
EP-T	mol N eq	1.02E-3	2.94E-6	1.85E-6	1.03E-3	2.53E-5	1.96E-4	1.29E-6	-4.95E-4	7.58E-4
POCP	kg NMVOC eq	3.63E-4	8.39E-7	6.28E-7	3.64E-4	7.24E-6	5.83E-5	4.44E-7	-1.70E-4	2.60E-4
ADP-mm	kg Sb eq	3.00E-6	3.38E-9	1.97E-8	3.02E-6	2.92E-8	2.74E-7	3.22E-10	-1.09E-6	2.24E-6
ADP-f	MJ	2.80E+0	2.01E-3	1.36E-3	2.80E+0	1.73E-2	1.87E-1	9.73E-4	-1.42E+0	1.59E+0
WDP	m3 depriv.	1.61E-1	6.16E-6	5.22E-5	1.61E-1	5.31E-5	7.37E-3	5.26E-6	-7.61E-2	9.26E-2
PM	disease inc.	4.24E-9	1.18E-11	9.08E-12	4.26E-9	1.02E-10	8.68E-10	6.70E-12	-2.10E-9	3.14E-9
IR	kBq U-235 eq	5.61E-3	8.77E-6	1.02E-6	5.61E-3	7.57E-5	6.67E-4	4.49E-6	-2.70E-3	3.66E-3
ETP-fw	CTUe	2.33E+0	1.63E-3	1.21E-2	2.34E+0	1.41E-2	1.45E+0	1.60E-2	-1.06E+0	2.76E+0
HTP-c	CTUh	8.70E-11	5.80E-14	6.17E-13	8.76E-11	5.00E-13	2.17E-11	2.62E-14	-4.00E-11	6.99E-11
HTP-nc	CTUh	2.38E-9	1.94E-12	1.57E-11	2.40E-9	1.68E-11	5.11E-10	3.05E-12	-1.01E-9	1.92E-9
SQP	Pt	3.28E+0	1.72E-3	2.24E-3	3.28E+0	1.48E-2	1.15E-1	2.50E-3	-3.05E+0	3.67E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.66E-1	2.88E-5	2.40E-2	7.90E-1	2.48E-4	1.35E-2	3.69E-5	-5.07E-1	2.97E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.66E-1	2.88E-5	2.40E-2	7.90E-1	2.48E-4	1.35E-2	3.69E-5	-5.07E-1	2.97E-1
PENRE	MJ	3.00E+0	2.13E-3	1.44E-3	3.01E+0	1.84E-2	1.99E-1	1.03E-3	-1.53E+0	1.70E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.00E+0	2.13E-3	1.44E-3	3.01E+0	1.84E-2	1.99E-1	1.03E-3	-1.53E+0	1.70E+0
PET	MJ	3.77E+0	2.16E-3	2.55E-2	3.80E+0	1.86E-2	2.13E-1	1.07E-3	-2.04E+0	1.99E+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	1.92E-3	2.27E-7	1.46E-6	1.92E-3	1.96E-6	2.04E-4	1.20E-6	-8.98E-4	1.23E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.22E-6	5.13E-9	2.73E-13	2.23E-6	4.43E-8	3.10E-7	1.18E-9	-1.38E-6	1.20E-6
NHWD	kg	1.21E-2	1.24E-4	1.05E-6	1.22E-2	1.07E-3	7.34E-3	4.29E-3	-5.34E-3	1.96E-2
RWD	kg	5.03E-6	1.36E-8	1.10E-13	5.04E-6	1.18E-7	7.18E-7	6.34E-9	-2.48E-6	3.41E-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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