

Environmental Profile

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

Ecochain v3.5.80



Product: 3003164 - Wadal PVC Branch 88° GY 50x40 S/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	2.27E-1	3.18E-3	1.45E-4	2.30E-1	2.81E-3	1.32E-1	9.00E-4	-1.29E-1	2.37E-1
GWP-f	kg CO2 eq	2.58E-1	3.17E-3	1.46E-4	2.61E-1	2.81E-3	9.43E-2	9.00E-4	-1.39E-1	2.20E-1
GWP-b	kg CO2 eq	-3.10E-2	1.93E-6	-1.54E-6	-3.10E-2	1.71E-6	3.78E-2	1.12E-6	9.58E-3	1.63E-2
GWP-luluc	kg CO2 eq	2.89E-4	1.12E-6	1.49E-7	2.90E-4	9.95E-7	3.54E-5	2.40E-8	-1.67E-4	1.60E-4
ODP	kg CFC11 eq	1.22E-7	7.32E-10	8.26E-12	1.22E-7	6.48E-10	9.78E-9	3.33E-11	-6.27E-8	7.00E-8
AP	mol H+ eq	1.25E-3	1.81E-5	1.47E-6	1.27E-3	1.60E-5	1.69E-4	8.14E-7	-5.41E-4	9.10E-4
EP-fw	kg P eq	1.19E-5	2.61E-8	8.24E-9	1.19E-5	2.31E-8	1.18E-6	1.08E-9	-5.57E-6	7.58E-6
EP-m	kg N eq	2.23E-4	6.47E-6	1.55E-7	2.30E-4	5.73E-6	4.20E-5	4.99E-7	-1.00E-4	1.78E-4
EP-T	mol N eq	2.44E-3	7.13E-5	1.85E-6	2.51E-3	6.32E-5	4.63E-4	3.24E-6	-1.09E-3	1.96E-3
POCP	kg NMVOC eq	8.01E-4	2.04E-5	6.28E-7	8.22E-4	1.81E-5	1.38E-4	1.12E-6	-3.65E-4	6.14E-4
ADP-mm	kg Sb eq	2.47E-4	8.21E-8	1.97E-8	2.47E-4	7.28E-8	6.62E-7	8.20E-10	-2.61E-6	2.46E-4
ADP-f	MJ	6.20E+0	4.87E-2	1.36E-3	6.25E+0	4.32E-2	4.53E-1	2.44E-3	-3.24E+0	3.51E+0
WDP	m3 depriv.	3.80E-1	1.50E-4	5.22E-5	3.81E-1	1.32E-4	1.77E-2	1.77E-5	-1.90E-1	2.08E-1
PM	disease inc.	9.03E-9	2.87E-10	9.08E-12	9.32E-9	2.54E-10	2.09E-9	1.68E-11	-4.48E-9	7.20E-9
IR	kBq U-235 eq	1.36E-2	2.13E-4	1.02E-6	1.38E-2	1.89E-4	1.61E-3	1.12E-5	-6.50E-3	9.12E-3
ETP-fw	CTUe	7.74E+0	3.96E-2	1.21E-2	7.79E+0	3.51E-2	3.46E+0	3.81E-2	-2.60E+0	8.73E+0
HTP-c	CTUh	2.29E-10	1.41E-12	6.17E-13	2.31E-10	1.25E-12	5.35E-11	6.87E-14	-8.22E-11	2.03E-10
HTP-nc	CTUh	6.94E-9	4.72E-11	1.57E-11	7.00E-9	4.18E-11	1.22E-9	7.34E-12	-2.52E-9	5.76E-9
SQP	Pt	4.09E+0	4.17E-2	2.24E-3	4.13E+0	3.69E-2	2.78E-1	6.23E-3	-4.52E+0	-6.44E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.40E+0	6.99E-4	2.40E-2	1.42E+0	6.19E-4	3.25E-2	9.00E-5	-8.15E-1	6.40E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.40E+0	6.99E-4	2.40E-2	1.42E+0	6.19E-4	3.25E-2	9.00E-5	-8.15E-1	6.40E-1
PENRE	MJ	6.65E+0	5.17E-2	1.44E-3	6.71E+0	4.58E-2	4.82E-1	2.59E-3	-3.50E+0	3.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.65E+0	5.17E-2	1.44E-3	6.71E+0	4.58E-2	4.82E-1	2.59E-3	-3.50E+0	3.74E+0
PET	MJ	8.05E+0	5.24E-2	2.55E-2	8.13E+0	4.65E-2	5.14E-1	2.68E-3	-4.31E+0	4.38E+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	4.55E-3	5.52E-6	1.46E-6	4.56E-3	4.89E-6	4.88E-4	2.98E-6	-2.25E-3	2.80E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.54E-5	1.25E-7	2.73E-13	3.56E-5	1.10E-7	7.47E-7	2.98E-9	-2.91E-6	3.35E-5
NHWD	kg	2.72E-2	3.02E-3	1.05E-6	3.02E-2	2.68E-3	1.72E-2	1.07E-2	-1.14E-2	4.93E-2
RWD	kg	1.20E-5	3.31E-7	1.10E-13	1.23E-5	2.94E-7	1.73E-6	1.58E-8	-5.86E-6	8.48E-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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