

Environmental Profile

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

Ecochain v3.5.80



Product: 3003103 - Wadal PVC Expansion piece GY 50
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	6.05E-1	7.27E-3	1.45E-4	6.12E-1	7.76E-3	3.16E-1	2.52E-3	-3.42E-1	5.96E-1
GWP-f	kg CO2 eq	6.64E-1	7.26E-3	1.46E-4	6.72E-1	7.75E-3	2.40E-1	2.52E-3	-3.60E-1	5.62E-1
GWP-b	kg CO2 eq	-6.03E-2	4.41E-6	-1.54E-6	-6.03E-2	4.71E-6	7.56E-2	3.15E-6	1.87E-2	3.40E-2
GWP-luluc	kg CO2 eq	6.60E-4	2.57E-6	1.49E-7	6.63E-4	2.74E-6	9.62E-5	6.42E-8	-3.86E-4	3.76E-4
ODP	kg CFC11 eq	3.32E-7	1.67E-9	8.26E-12	3.34E-7	1.79E-9	2.65E-8	9.25E-11	-1.64E-7	1.98E-7
AP	mol H+ eq	3.08E-3	4.14E-5	1.47E-6	3.12E-3	4.41E-5	4.55E-4	2.25E-6	-1.41E-3	2.22E-3
EP-fw	kg P eq	2.93E-5	5.98E-8	8.24E-9	2.94E-5	6.38E-8	3.22E-6	2.92E-9	-1.41E-5	1.85E-5
EP-m	kg N eq	5.42E-4	1.48E-5	1.55E-7	5.57E-4	1.58E-5	1.12E-4	1.45E-6	-2.56E-4	4.31E-4
EP-T	mol N eq	5.84E-3	1.63E-4	1.85E-6	6.01E-3	1.74E-4	1.23E-3	8.97E-6	-2.76E-3	4.66E-3
POCP	kg NMVOC eq	1.98E-3	4.67E-5	6.28E-7	2.03E-3	4.98E-5	3.69E-4	3.10E-6	-9.44E-4	1.51E-3
ADP-mm	kg Sb eq	3.10E-4	1.88E-7	1.97E-8	3.11E-4	2.00E-7	1.79E-6	2.24E-9	-7.06E-6	3.05E-4
ADP-f	MJ	1.65E+1	1.12E-1	1.36E-3	1.67E+1	1.19E-1	1.23E+0	6.75E-3	-8.61E+0	9.39E+0
WDP	m3 depriv.	1.01E+0	3.42E-4	5.22E-5	1.01E+0	3.65E-4	4.84E-2	4.03E-5	-4.99E-1	5.61E-1
PM	disease inc.	2.25E-8	6.56E-10	9.08E-12	2.31E-8	6.99E-10	5.62E-9	4.65E-11	-1.11E-8	1.84E-8
IR	kBq U-235 eq	3.54E-2	4.87E-4	1.02E-6	3.59E-2	5.20E-4	4.33E-3	3.11E-5	-1.68E-2	2.40E-2
ETP-fw	CTUe	1.61E+1	9.06E-2	1.21E-2	1.62E+1	9.66E-2	9.45E+0	1.04E-1	-6.34E+0	1.95E+1
HTP-c	CTUh	5.10E-10	3.22E-12	6.17E-13	5.14E-10	3.44E-12	1.36E-10	1.84E-13	-2.07E-10	4.47E-10
HTP-nc	CTUh	1.58E-8	1.08E-10	1.57E-11	1.59E-8	1.15E-10	3.30E-9	2.01E-11	-6.41E-9	1.29E-8
SQP	Pt	8.52E+0	9.54E-2	2.24E-3	8.62E+0	1.02E-1	7.52E-1	1.73E-2	-9.27E+0	2.15E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.69E+0	1.60E-3	2.40E-2	2.72E+0	1.71E-3	8.83E-2	2.55E-4	-1.72E+0	1.09E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.69E+0	1.60E-3	2.40E-2	2.72E+0	1.71E-3	8.83E-2	2.55E-4	-1.72E+0	1.09E+0
PENRE	MJ	1.77E+1	1.18E-1	1.44E-3	1.79E+1	1.26E-1	1.30E+0	7.16E-3	-9.28E+0	1.00E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.77E+1	1.18E-1	1.44E-3	1.79E+1	1.26E-1	1.30E+0	7.16E-3	-9.28E+0	1.00E+1
PET	MJ	2.04E+1	1.20E-1	2.55E-2	2.06E+1	1.28E-1	1.39E+0	7.42E-3	-1.10E+1	1.11E+1
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	1.15E-2	1.26E-5	1.46E-6	1.16E-2	1.35E-5	1.34E-3	8.29E-6	-5.76E-3	7.15E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.96E-5	2.85E-7	2.73E-13	4.99E-5	3.04E-7	2.01E-6	8.19E-9	-7.40E-6	4.48E-5
NHWD	kg	6.60E-2	6.91E-3	1.05E-6	7.29E-2	7.37E-3	4.52E-2	2.97E-2	-2.91E-2	1.26E-1
RWD	kg	3.19E-5	7.58E-7	1.10E-13	3.27E-5	8.09E-7	4.65E-6	4.40E-8	-1.51E-5	2.31E-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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