

Environmental Profile

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

Ecochain v3.5.80



Product: 3003105 - Wadal PVC Expansion piece GY 75
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	9.46E-1	1.08E-2	1.45E-4	9.57E-1	1.21E-2	4.93E-1	3.92E-3	-5.30E-1	9.35E-1
GWP-f	kg CO2 eq	1.04E+0	1.08E-2	1.46E-4	1.05E+0	1.20E-2	3.78E-1	3.92E-3	-5.61E-1	8.78E-1
GWP-b	kg CO2 eq	-9.03E-2	6.54E-6	-1.54E-6	-9.03E-2	7.31E-6	1.15E-1	4.91E-6	3.15E-2	5.62E-2
GWP-luluc	kg CO2 eq	1.04E-3	3.81E-6	1.49E-7	1.04E-3	4.26E-6	1.50E-4	9.93E-8	-6.16E-4	5.79E-4
ODP	kg CFC11 eq	5.19E-7	2.48E-9	8.26E-12	5.22E-7	2.78E-9	4.15E-8	1.44E-10	-2.56E-7	3.10E-7
AP	mol H+ eq	4.78E-3	6.13E-5	1.47E-6	4.85E-3	6.86E-5	7.10E-4	3.49E-6	-2.19E-3	3.44E-3
EP-fw	kg P eq	4.57E-5	8.86E-8	8.24E-9	4.58E-5	9.91E-8	5.02E-6	4.52E-9	-2.22E-5	2.88E-5
EP-m	kg N eq	8.45E-4	2.19E-5	1.55E-7	8.67E-4	2.46E-5	1.75E-4	2.28E-6	-3.99E-4	6.70E-4
EP-T	mol N eq	9.09E-3	2.42E-4	1.85E-6	9.33E-3	2.71E-4	1.93E-3	1.40E-5	-4.31E-3	7.24E-3
POCP	kg NMVOC eq	3.09E-3	6.91E-5	6.28E-7	3.16E-3	7.73E-5	5.75E-4	4.82E-6	-1.47E-3	2.35E-3
ADP-mm	kg Sb eq	4.68E-4	2.79E-7	1.97E-8	4.68E-4	3.12E-7	2.79E-6	3.48E-9	-1.10E-5	4.60E-4
ADP-f	MJ	2.58E+1	1.65E-1	1.36E-3	2.60E+1	1.85E-1	1.91E+0	1.05E-2	-1.34E+1	1.47E+1
WDP	m3 depriv.	1.58E+0	5.07E-4	5.22E-5	1.58E+0	5.67E-4	7.56E-2	6.04E-5	-7.78E-1	8.75E-1
PM	disease inc.	3.50E-8	9.72E-10	9.08E-12	3.60E-8	1.09E-9	8.75E-9	7.23E-11	-1.74E-8	2.85E-8
IR	kBq U-235 eq	5.55E-2	7.23E-4	1.02E-6	5.63E-2	8.08E-4	6.75E-3	4.85E-5	-2.62E-2	3.76E-2
ETP-fw	CTUe	2.51E+1	1.34E-1	1.21E-2	2.52E+1	1.50E-1	1.48E+1	1.63E-1	-1.00E+1	3.03E+1
HTP-c	CTUh	7.75E-10	4.78E-12	6.17E-13	7.80E-10	5.34E-12	2.11E-10	2.84E-13	-3.22E-10	6.75E-10
HTP-nc	CTUh	2.43E-8	1.60E-10	1.57E-11	2.45E-8	1.79E-10	5.14E-9	3.14E-11	-1.02E-8	1.97E-8
SQP	Pt	1.30E+1	1.41E-1	2.24E-3	1.32E+1	1.58E-1	1.17E+0	2.69E-2	-1.46E+1	-4.99E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.15E+0	2.37E-3	2.40E-2	4.18E+0	2.65E-3	1.38E-1	3.98E-4	-2.71E+0	1.61E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.15E+0	2.37E-3	2.40E-2	4.18E+0	2.65E-3	1.38E-1	3.98E-4	-2.71E+0	1.61E+0
PENRE	MJ	2.77E+1	1.75E-1	1.44E-3	2.79E+1	1.96E-1	2.03E+0	1.11E-2	-1.44E+1	1.57E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.77E+1	1.75E-1	1.44E-3	2.79E+1	1.96E-1	2.03E+0	1.11E-2	-1.44E+1	1.57E+1
PET	MJ	3.19E+1	1.78E-1	2.55E-2	3.21E+1	1.99E-1	2.17E+0	1.15E-2	-1.72E+1	1.73E+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	1.79E-2	1.87E-5	1.46E-6	1.80E-2	2.09E-5	2.10E-3	1.29E-5	-9.04E-3	1.11E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.51E-5	4.23E-7	2.73E-13	7.55E-5	4.73E-7	3.13E-6	1.27E-8	-1.15E-5	6.76E-5
NHWD	kg	1.02E-1	1.02E-2	1.05E-6	1.12E-1	1.15E-2	7.04E-2	4.63E-2	-4.52E-2	1.95E-1
RWD	kg	5.02E-5	1.12E-6	1.10E-13	5.13E-5	1.26E-6	7.24E-6	6.85E-8	-2.36E-5	3.63E-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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