

Environmental Profile

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

Ecochain v3.5.80



Product: 3003222 - Wadal PVC Reducer bush GY 50x40
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	7.33E-2	1.22E-3	1.45E-4	7.46E-2	1.02E-3	7.61E-2	3.32E-4	-5.52E-2	9.69E-2
GWP-f	kg CO2 eq	1.06E-1	1.21E-3	1.46E-4	1.07E-1	1.02E-3	4.17E-2	3.32E-4	-5.73E-2	9.30E-2
GWP-b	kg CO2 eq	-3.27E-2	7.38E-7	-1.54E-6	-3.27E-2	6.21E-7	3.44E-2	4.06E-7	2.19E-3	3.89E-3
GWP-luluc	kg CO2 eq	1.18E-4	4.30E-7	1.49E-7	1.18E-4	3.62E-7	1.27E-5	9.10E-9	-6.17E-5	6.96E-5
ODP	kg CFC11 eq	4.35E-8	2.80E-10	8.26E-12	4.38E-8	2.36E-10	3.48E-9	1.21E-11	-2.35E-8	2.40E-8
AP	mol H+ eq	5.20E-4	6.92E-6	1.47E-6	5.29E-4	5.83E-6	6.21E-5	2.98E-7	-2.14E-4	3.83E-4
EP-fw	kg P eq	4.72E-6	1.00E-8	8.24E-9	4.74E-6	8.42E-9	4.24E-7	4.04E-10	-2.06E-6	3.11E-6
EP-m	kg N eq	9.38E-5	2.48E-6	1.55E-7	9.64E-5	2.08E-6	1.57E-5	1.79E-7	-4.15E-5	7.30E-5
EP-T	mol N eq	1.04E-3	2.73E-5	1.85E-6	1.07E-3	2.30E-5	1.74E-4	1.18E-6	-4.53E-4	8.12E-4
POCP	kg NMVOC eq	3.52E-4	7.80E-6	6.28E-7	3.61E-4	6.57E-6	5.16E-5	4.08E-7	-1.57E-4	2.63E-4
ADP-mm	kg Sb eq	9.90E-5	3.14E-8	1.97E-8	9.91E-5	2.65E-8	2.39E-7	3.04E-10	-9.92E-7	9.84E-5
ADP-f	MJ	2.51E+0	1.87E-2	1.36E-3	2.53E+0	1.57E-2	1.65E-1	8.89E-4	-1.30E+0	1.41E+0
WDP	m3 depriv.	1.43E-1	5.72E-5	5.22E-5	1.43E-1	4.82E-5	6.30E-3	7.76E-6	-6.85E-2	8.11E-2
PM	disease inc.	4.09E-9	1.10E-10	9.08E-12	4.21E-9	9.23E-11	7.70E-10	6.12E-12	-1.92E-9	3.16E-9
IR	kBq U-235 eq	5.28E-3	8.15E-5	1.02E-6	5.37E-3	6.86E-5	5.83E-4	4.05E-6	-2.44E-3	3.58E-3
ETP-fw	CTUe	2.98E+0	1.51E-2	1.21E-2	3.01E+0	1.27E-2	1.22E+0	1.34E-2	-9.44E-1	3.31E+0
HTP-c	CTUh	1.01E-10	5.39E-13	6.17E-13	1.02E-10	4.54E-13	2.12E-11	2.59E-14	-3.71E-11	8.69E-11
HTP-nc	CTUh	2.75E-9	1.81E-11	1.57E-11	2.78E-9	1.52E-11	4.47E-10	2.59E-12	-9.10E-10	2.34E-9
SQP	Pt	3.25E+0	1.60E-2	2.24E-3	3.27E+0	1.34E-2	1.03E-1	2.27E-3	-2.90E+0	4.85E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.46E-1	2.68E-4	2.40E-2	7.70E-1	2.25E-4	1.16E-2	3.21E-5	-4.78E-1	3.04E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.46E-1	2.68E-4	2.40E-2	7.70E-1	2.25E-4	1.16E-2	3.21E-5	-4.78E-1	3.04E-1
PENRE	MJ	2.69E+0	1.98E-2	1.44E-3	2.71E+0	1.67E-2	1.75E-1	9.44E-4	-1.40E+0	1.50E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.69E+0	1.98E-2	1.44E-3	2.71E+0	1.67E-2	1.75E-1	9.44E-4	-1.40E+0	1.50E+0
PET	MJ	3.44E+0	2.01E-2	2.55E-2	3.48E+0	1.69E-2	1.87E-1	9.76E-4	-1.88E+0	1.81E+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	1.84E-3	2.11E-6	1.46E-6	1.84E-3	1.78E-6	1.75E-4	1.08E-6	-8.02E-4	1.22E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.42E-5	4.77E-8	2.73E-13	1.42E-5	4.01E-8	2.75E-7	1.10E-9	-1.28E-6	1.33E-5
NHWD	kg	1.18E-2	1.16E-3	1.05E-6	1.30E-2	9.73E-4	6.66E-3	3.89E-3	-4.93E-3	1.96E-2
RWD	kg	4.69E-6	1.27E-7	1.10E-13	4.81E-6	1.07E-7	6.34E-7	5.76E-9	-2.25E-6	3.31E-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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