

Environmental Profile

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

Ecochain v3.5.80



Product: 3003121 - Wadal PVC Bend 88° GY 125 S/SP
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	1.13E+0	1.85E-2	1.45E-4	1.15E+0	1.49E-2	7.76E-1	4.74E-3	-6.55E-1	1.29E+0
GWP-f	kg CO2 eq	1.38E+0	1.85E-2	1.46E-4	1.40E+0	1.49E-2	4.67E-1	4.74E-3	-7.48E-1	1.14E+0
GWP-b	kg CO2 eq	-2.52E-1	1.12E-5	-1.54E-6	-2.52E-1	9.06E-6	3.09E-1	5.99E-6	9.42E-2	1.51E-1
GWP-luluc	kg CO2 eq	1.77E-3	6.54E-6	1.49E-7	1.77E-3	5.28E-6	1.91E-4	1.24E-7	-1.23E-3	7.43E-4
ODP	kg CFC11 eq	6.61E-7	4.26E-9	8.26E-12	6.65E-7	3.44E-9	5.33E-8	1.77E-10	-3.35E-7	3.87E-7
AP	mol H+ eq	6.64E-3	1.05E-4	1.47E-6	6.74E-3	8.50E-5	9.24E-4	4.30E-6	-3.13E-3	4.63E-3
EP-fw	kg P eq	6.48E-5	1.52E-7	8.24E-9	6.49E-5	1.23E-7	6.39E-6	5.63E-9	-3.38E-5	3.77E-5
EP-m	kg N eq	1.24E-3	3.77E-5	1.55E-7	1.27E-3	3.04E-5	2.31E-4	2.67E-6	-5.94E-4	9.44E-4
EP-T	mol N eq	1.33E-2	4.15E-4	1.85E-6	1.37E-2	3.35E-4	2.55E-3	1.71E-5	-6.49E-3	1.01E-2
POCP	kg NMVOC eq	4.31E-3	1.19E-4	6.28E-7	4.43E-3	9.58E-5	7.60E-4	5.90E-6	-2.14E-3	3.15E-3
ADP-mm	kg Sb eq	1.14E-3	4.78E-7	1.97E-8	1.14E-3	3.86E-7	3.63E-6	4.31E-9	-1.43E-5	1.13E-3
ADP-f	MJ	3.29E+1	2.84E-1	1.36E-3	3.32E+1	2.29E-1	2.46E+0	1.29E-2	-1.74E+1	1.85E+1
WDP	m3 depriv.	2.02E+0	8.70E-4	5.22E-5	2.02E+0	7.03E-4	9.55E-2	8.38E-5	-1.07E+0	1.04E+0
PM	disease inc.	5.10E-8	1.67E-9	9.08E-12	5.27E-8	1.35E-9	1.15E-8	8.89E-11	-2.94E-8	3.62E-8
IR	kBq U-235 eq	7.36E-2	1.24E-3	1.02E-6	7.48E-2	1.00E-3	8.77E-3	5.93E-5	-3.76E-2	4.70E-2
ETP-fw	CTUe	4.46E+1	2.30E-1	1.21E-2	4.49E+1	1.86E-1	1.88E+1	2.06E-1	-1.74E+1	4.67E+1
HTP-c	CTUh	1.23E-9	8.19E-12	6.17E-13	1.24E-9	6.62E-12	2.82E-10	3.57E-13	-4.92E-10	1.04E-9
HTP-nc	CTUh	3.65E-8	2.75E-10	1.57E-11	3.68E-8	2.22E-10	6.59E-9	3.95E-11	-1.45E-8	2.92E-8
SQP	Pt	3.07E+1	2.43E-1	2.24E-3	3.10E+1	1.96E-1	1.50E+0	3.31E-2	-3.80E+1	-5.34E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.04E+0	4.07E-3	2.40E-2	9.07E+0	3.29E-3	1.75E-1	4.82E-4	-6.68E+0	2.57E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.04E+0	4.07E-3	2.40E-2	9.07E+0	3.29E-3	1.75E-1	4.82E-4	-6.68E+0	2.57E+0
PENRE	MJ	3.53E+1	3.01E-1	1.44E-3	3.56E+1	2.43E-1	2.62E+0	1.37E-2	-1.87E+1	1.97E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.53E+1	3.01E-1	1.44E-3	3.56E+1	2.43E-1	2.62E+0	1.37E-2	-1.87E+1	1.97E+1
PET	MJ	4.43E+1	3.05E-1	2.55E-2	4.46E+1	2.46E-1	2.79E+0	1.42E-2	-2.54E+1	2.23E+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	2.39E-2	3.21E-5	1.46E-6	2.39E-2	2.59E-5	2.63E-3	1.58E-5	-1.36E-2	1.30E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.68E-4	7.25E-7	2.73E-13	1.69E-4	5.86E-7	4.09E-6	1.57E-8	-1.60E-5	1.57E-4
NHWD	kg	1.51E-1	1.76E-2	1.05E-6	1.69E-1	1.42E-2	9.14E-2	5.67E-2	-6.73E-2	2.64E-1
RWD	kg	6.54E-5	1.93E-6	1.10E-13	6.74E-5	1.56E-6	9.50E-6	8.40E-8	-3.41E-5	4.44E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777