

Environmental Profile

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

Ecochain v3.5.80



Product: 3003087 - Wadal PVC Solv.Cement Coupler GY 90
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	3.31E-1	4.86E-3	1.45E-4	3.36E-1	4.37E-3	2.11E-1	1.39E-3	-1.94E-1	3.60E-1
GWP-f	kg CO2 eq	3.93E-1	4.86E-3	1.46E-4	3.98E-1	4.37E-3	1.36E-1	1.39E-3	-2.13E-1	3.27E-1
GWP-b	kg CO2 eq	-6.27E-2	2.95E-6	-1.54E-6	-6.27E-2	2.65E-6	7.56E-2	1.75E-6	1.95E-2	3.25E-2
GWP-luluc	kg CO2 eq	4.68E-4	1.72E-6	1.49E-7	4.70E-4	1.55E-6	5.53E-5	3.67E-8	-2.98E-4	2.29E-4
ODP	kg CFC11 eq	1.91E-7	1.12E-9	8.26E-12	1.92E-7	1.01E-9	1.54E-8	5.17E-11	-9.72E-8	1.11E-7
AP	mol H+ eq	1.90E-3	2.77E-5	1.47E-6	1.93E-3	2.49E-5	2.65E-4	1.26E-6	-8.68E-4	1.35E-3
EP-fw	kg P eq	1.84E-5	4.00E-8	8.24E-9	1.84E-5	3.59E-8	1.85E-6	1.66E-9	-9.12E-6	1.12E-5
EP-m	kg N eq	3.46E-4	9.90E-6	1.55E-7	3.56E-4	8.90E-6	6.58E-5	7.78E-7	-1.62E-4	2.69E-4
EP-T	mol N eq	3.75E-3	1.09E-4	1.85E-6	3.86E-3	9.81E-5	7.25E-4	5.02E-6	-1.77E-3	2.92E-3
POCP	kg NMVOC eq	1.22E-3	3.12E-5	6.28E-7	1.25E-3	2.80E-5	2.17E-4	1.73E-6	-5.90E-4	9.08E-4
ADP-mm	kg Sb eq	3.47E-4	1.26E-7	1.97E-8	3.47E-4	1.13E-7	1.04E-6	1.27E-9	-4.11E-6	3.44E-4
ADP-f	MJ	9.43E+0	7.46E-2	1.36E-3	9.50E+0	6.70E-2	7.09E-1	3.78E-3	-4.99E+0	5.29E+0
WDP	m3 depriv.	5.86E-1	2.29E-4	5.22E-5	5.86E-1	2.06E-4	2.77E-2	2.58E-5	-3.02E-1	3.12E-1
PM	disease inc.	1.41E-8	4.39E-10	9.08E-12	1.46E-8	3.94E-10	3.28E-9	2.60E-11	-7.64E-9	1.06E-8
IR	kBq U-235 eq	2.10E-2	3.26E-4	1.02E-6	2.14E-2	2.93E-4	2.52E-3	1.73E-5	-1.04E-2	1.38E-2
ETP-fw	CTUe	1.21E+1	6.06E-2	1.21E-2	1.22E+1	5.44E-2	5.44E+0	5.98E-2	-4.43E+0	1.33E+1
HTP-c	CTUh	3.53E-10	2.15E-12	6.17E-13	3.56E-10	1.94E-12	8.17E-11	1.05E-13	-1.35E-10	3.05E-10
HTP-nc	CTUh	1.06E-8	7.22E-11	1.57E-11	1.07E-8	6.49E-11	1.91E-9	1.15E-11	-4.04E-9	8.63E-9
SQP	Pt	7.72E+0	6.38E-2	2.24E-3	7.78E+0	5.73E-2	4.34E-1	9.68E-3	-8.89E+0	-6.07E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.42E+0	1.07E-3	2.40E-2	2.44E+0	9.61E-4	5.08E-2	1.40E-4	-1.57E+0	9.22E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.42E+0	1.07E-3	2.40E-2	2.44E+0	9.61E-4	5.08E-2	1.40E-4	-1.57E+0	9.22E-1
PENRE	MJ	1.01E+1	7.92E-2	1.44E-3	1.02E+1	7.11E-2	7.55E-1	4.01E-3	-5.37E+0	5.65E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.01E+1	7.92E-2	1.44E-3	1.02E+1	7.11E-2	7.55E-1	4.01E-3	-5.37E+0	5.65E+0
PET	MJ	1.25E+1	8.02E-2	2.55E-2	1.26E+1	7.21E-2	8.05E-1	4.15E-3	-6.94E+0	6.57E+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	6.88E-3	8.44E-6	1.46E-6	6.89E-3	7.58E-6	7.63E-4	4.62E-6	-3.67E-3	3.99E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.05E-5	1.91E-7	2.73E-13	5.07E-5	1.71E-7	1.17E-6	4.61E-9	-4.52E-6	4.75E-5
NHWD	kg	4.24E-2	4.62E-3	1.05E-6	4.70E-2	4.15E-3	2.63E-2	1.66E-2	-1.86E-2	7.55E-2
RWD	kg	1.86E-5	5.07E-7	1.10E-13	1.91E-5	4.56E-7	2.72E-6	2.46E-8	-9.43E-6	1.29E-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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