

Environmental Profile

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

Ecochain v3.5.80



Product: 3003090 - Wadal PVC Solv.Cement Coupler GY 160
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	9.11E-1	1.35E-2	1.45E-4	9.25E-1	1.24E-2	6.50E-1	3.92E-3	-5.52E-1	1.04E+0
GWP-f	kg CO2 eq	1.13E+0	1.34E-2	1.46E-4	1.15E+0	1.23E-2	3.88E-1	3.92E-3	-6.15E-1	9.35E-1
GWP-b	kg CO2 eq	-2.22E-1	8.17E-6	-1.54E-6	-2.22E-1	7.49E-6	2.62E-1	4.95E-6	6.36E-2	1.04E-1
GWP-luluc	kg CO2 eq	1.39E-3	4.76E-6	1.49E-7	1.40E-3	4.37E-6	1.57E-4	1.03E-7	-9.22E-4	6.35E-4
ODP	kg CFC11 eq	5.45E-7	3.10E-9	8.26E-12	5.48E-7	2.84E-9	4.39E-8	1.46E-10	-2.76E-7	3.18E-7
AP	mol H+ eq	5.44E-3	7.66E-5	1.47E-6	5.52E-3	7.03E-5	7.58E-4	3.56E-6	-2.53E-3	3.81E-3
EP-fw	kg P eq	5.28E-5	1.11E-7	8.24E-9	5.29E-5	1.02E-7	5.27E-6	4.66E-9	-2.68E-5	3.15E-5
EP-m	kg N eq	1.00E-3	2.74E-5	1.55E-7	1.03E-3	2.52E-5	1.89E-4	2.20E-6	-4.79E-4	7.68E-4
EP-T	mol N eq	1.08E-2	3.02E-4	1.85E-6	1.11E-2	2.77E-4	2.08E-3	1.42E-5	-5.23E-3	8.29E-3
POCP	kg NMVOC eq	3.54E-3	8.64E-5	6.28E-7	3.63E-3	7.92E-5	6.21E-4	4.88E-6	-1.74E-3	2.59E-3
ADP-mm	kg Sb eq	9.43E-4	3.48E-7	1.97E-8	9.44E-4	3.19E-7	2.98E-6	3.57E-9	-1.18E-5	9.35E-4
ADP-f	MJ	2.71E+1	2.06E-1	1.36E-3	2.73E+1	1.89E-1	2.02E+0	1.07E-2	-1.43E+1	1.52E+1
WDP	m3 depriv.	1.67E+0	6.34E-4	5.22E-5	1.67E+0	5.81E-4	7.88E-2	6.98E-5	-8.68E-1	8.81E-1
PM	disease inc.	4.14E-8	1.21E-9	9.08E-12	4.26E-8	1.11E-9	9.39E-9	7.35E-11	-2.32E-8	3.00E-8
IR	kBq U-235 eq	6.04E-2	9.02E-4	1.02E-6	6.13E-2	8.28E-4	7.20E-3	4.91E-5	-3.03E-2	3.91E-2
ETP-fw	CTUe	3.52E+1	1.68E-1	1.21E-2	3.53E+1	1.54E-1	1.55E+1	1.70E-1	-1.33E+1	3.78E+1
HTP-c	CTUh	1.01E-9	5.97E-12	6.17E-13	1.02E-9	5.47E-12	2.32E-10	2.95E-13	-4.03E-10	8.53E-10
HTP-nc	CTUh	3.00E-8	2.00E-10	1.57E-11	3.02E-8	1.83E-10	5.43E-9	3.26E-11	-1.17E-8	2.41E-8
SQP	Pt	2.59E+1	1.77E-1	2.24E-3	2.61E+1	1.62E-1	1.24E+0	2.74E-2	-2.98E+1	-2.29E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.36E+0	2.96E-3	2.40E-2	7.39E+0	2.72E-3	1.45E-1	3.98E-4	-5.19E+0	2.35E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.36E+0	2.96E-3	2.40E-2	7.39E+0	2.72E-3	1.45E-1	3.98E-4	-5.19E+0	2.35E+0
PENRE	MJ	2.91E+1	2.19E-1	1.44E-3	2.93E+1	2.01E-1	2.15E+0	1.13E-2	-1.54E+1	1.62E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.91E+1	2.19E-1	1.44E-3	2.93E+1	2.01E-1	2.15E+0	1.13E-2	-1.54E+1	1.62E+1
PET	MJ	3.64E+1	2.22E-1	2.55E-2	3.67E+1	2.04E-1	2.30E+0	1.17E-2	-2.06E+1	1.86E+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	1.96E-2	2.34E-5	1.46E-6	1.97E-2	2.14E-5	2.17E-3	1.31E-5	-1.08E-2	1.11E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.39E-4	5.28E-7	2.73E-13	1.39E-4	4.84E-7	3.35E-6	1.30E-8	-1.32E-5	1.30E-4
NHWD	kg	1.23E-1	1.28E-2	1.05E-6	1.36E-1	1.17E-2	7.52E-2	4.69E-2	-5.50E-2	2.15E-1
RWD	kg	5.36E-5	1.40E-6	1.10E-13	5.50E-5	1.29E-6	7.78E-6	6.94E-8	-2.75E-5	3.67E-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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