Environmental Profile

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

Ecochain v3.5.80

Product:	3003240 - Wadal PVC Reducer bush GY 125x75
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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
C4 Disposal

Benefits and loads beyond the system boundaries

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

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.46E-1	5.08E-3	1.45E-4	3.51E-1	4.61E-3	2.16E-1	1.46E-3	-2.06E-1	3.67E-1
GWP-f	kg CO2 eq	4.08E-1	5.08E-3	1.46E-4	4.13E-1	4.60E-3	1.42E-1	1.46E-3	-2.21E-1	3.41E-1
GWP-b	kg CO2 eq	-6.26E-2	3.08E-6	-1.54E-6	-6.26E-2	2.79E-6	7.38E-2	1.84E-6	1.53E-2	2.65E-2
GWP-luluc	kg CO2 eq	4.59E-4	1.80E-6	1.49E-7	4.61E-4	1.63E-6	5.82E-5	3.86E-8	-2.75E-4	2.45E-4
ODP	kg CFC11 eq	2.01E-7	1.17E-9	8.26E-12	2.02E-7	1.06E-9	1.62E-8	5.45E-11	-1.02E-7	1.17E-7
AP	mol H+ eq	1.96E-3	2.89E-5	1.47E-6	1.99E-3	2.62E-5	2.77E-4	1.33E-6	-8.87E-4	1.41E-3
EP-fw	kg P eq	1.89E-5	4.18E-8	8.24E-9	1.90E-5	3.79E-8	1.95E-6	1.74E-9	-9.13E-6	1.18E-5
EP-m	kg N eq	3.52E-4	1.04E-5	1.55E-7	3.63E-4	9.38E-6	6.84E-5	8.21E-7	-1.64E-4	2.77E-4
EP-T	mol N eq	3.83E-3	1.14E-4	1.85E-6	3.95E-3	1.03E-4	7.54E-4	5.29E-6	-1.78E-3	3.02E-3
POCP	kg NMVOC eq	1.26E-3	3.26E-5	6.28E-7	1.29E-3	2.96E-5	2.25E-4	1.82E-6	-6.01E-4	9.44E-4
ADP-mm	kg Sb eq	3.48E-4	1.31E-7	1.97E-8	3.48E-4	1.19E-7	1.09E-6	1.33E-9	-4.29E-6	3.45E-4
ADP-f	MJ	9.84E+0	7.80E-2	1.36E-3	9.92E+0	7.07E-2	7.43E-1	3.98E-3	-5.19E+0	5.54E+0
WDP	m3 depriv.	6.15E-1	2.39E-4	5.22E-5	6.16E-1	2.17E-4	2.92E-2	2.67E-5	-3.11E-1	3.34E-1
PM	disease inc.	1.43E-8	4.58E-10	9.08E-12	1.48E-8	4.15E-10	3.42E-9	2.74E-11	-7.49E-9	1.12E-8
IR	kBq U-235 eq	2.19E-2	3.41E-4	1.02E-6	2.22E-2	3.09E-4	2.64E-3	1.83E-5	-1.06E-2	1.45E-2
ETP-fw	CTUe	1.19E+1	6.33E-2	1.21E-2	1.20E+1	5.74E-2	5.74E+0	6.32E-2	-4.26E+0	1.36E+1
HTP-c	CTUh	3.64E-10	2.25E-12	6.17E-13	3.67E-10	2.04E-12	8.50E-11	1.11E-13	-1.38E-10	3.16E-10
HTP-nc	CTUh	1.10E-8	7.55E-11	1.57E-11	1.11E-8	6.84E-11	2.00E-9	1.21E-11	-4.14E-9	9.00E-9
SQP	Pt	7.61E+0	6.67E-2	2.24E-3	7.68E+0	6.04E-2	4.55E-1	1.02E-2	-8.17E+0	3.51E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.45E+0	1.12E-3	2.40E-2	2.47E+0	1.01E-3	5.35E-2	1.48E-4	-1.45E+0	1.08E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.45E+0	1.12E-3	2.40E-2	2.47E+0	1.01E-3	5.35E-2	1.48E-4	-1.45E+0	1.08E+0
PENRE	MJ	1.06E+1	8.28E-2	1.44E-3	1.06E+1	7.50E-2	7.91E-1	4.23E-3	-5.59E+0	5.91E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.06E+1	8.28E-2	1.44E-3	1.06E+1	7.50E-2	7.91E-1	4.23E-3	-5.59E+0	5.91E+0
PET	MJ	1.30E+1	8.39E-2	2.55E-2	1.31E+1	7.60E-2	8.44E-1	4.38E-3	-7.04E+0	6.99E+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	7.15E-3	8.82E-6	1.46E-6	7.16E-3	7.99E-6	8.04E-4	4.88E-6	-3.67E-3	4.31E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.08E-5	1.99E-7	2.73E-13	5.10E-5	1.81E-7	1.22E-6	4.86E-9	-4.67E-6	4.78E-5
NHWD	kg	4.34E-2	4.83E-3	1.05E-6	4.83E-2	4.38E-3	2.75E-2	1.75E-2	-1.91E-2	7.86E-2
RWD	kg	1.93E-5	5.30E-7	1.10E-13	1.98E-5	4.80E-7	2.84E-6	2.59E-8	-9.60E-6	1.36E-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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