Environmental Profile

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

Ecochain v3.5.80

Product:	3025720 - PVC Repair Coupler GY 100 BC
Unit:	1 Piece
Manufacturer:	Wavin - FR - Varennes

The Wavin range of PVC pipes and fittings to be glued covers all the usual diameters and allows you to create networks that are 100% compatible, homogeneous and meet the requirements of the French market.

LCA standard:	EN15804+A2 (2019)
Standard database:	Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified:	Yes
Issue date:	24-11-2022
End of validity:	24-11-2027
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 - FR - Varennes (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	2.59E-1	1.10E-2	1.27E-2	2.82E-1	3.87E-3	2.24E-1	1.20E-3	-1.46E-1	3.65E-1
GWP-f	kg CO2 eq	3.46E-1	1.10E-2	9.98E-3	3.67E-1	3.87E-3	1.09E-1	1.20E-3	-1.98E-1	2.82E-1
GWP-b	kg CO2 eq	-8.79E-2	6.70E-6	2.69E-3	-8.52E-2	2.35E-6	1.15E-1	1.50E-6	5.26E-2	8.24E-2
GWP-luluc	kg CO2 eq	6.12E-4	3.90E-6	9.57E-6	6.25E-4	1.37E-6	4.86E-5	3.25E-8	-5.21E-4	1.54E-4
ODP	kg CFC11 eq	1.65E-7	2.54E-9	1.30E-9	1.69E-7	8.92E-10	1.36E-8	4.54E-11	-8.56E-8	9.75E-8
AP	mol H+ eq	1.74E-3	6.28E-5	5.67E-5	1.86E-3	2.20E-5	2.46E-4	1.10E-6	-9.36E-4	1.19E-3
EP-fw	kg P eq	1.77E-5	9.07E-8	2.38E-7	1.80E-5	3.18E-8	1.63E-6	1.46E-9	-1.11E-5	8.54E-6
EP-m	kg N eq	3.51E-4	2.25E-5	1.66E-5	3.90E-4	7.89E-6	6.32E-5	6.69E-7	-1.84E-4	2.78E-4
EP-T	mol N eq	3.74E-3	2.48E-4	2.00E-4	4.19E-3	8.69E-5	6.96E-4	4.39E-6	-2.04E-3	2.94E-3
POCP	kg NMVOC eq	1.13E-3	7.08E-5	4.91E-5	1.25E-3	2.48E-5	2.08E-4	1.51E-6	-6.43E-4	8.45E-4
ADP-mm	kg Sb eq	3.94E-4	2.85E-7	1.96E-7	3.94E-4	1.00E-7	9.76E-7	1.11E-9	-3.83E-6	3.91E-4
ADP-f	MJ	8.08E+0	1.69E-1	1.39E-1	8.39E+0	5.94E-2	6.49E-1	3.31E-3	-4.54E+0	4.56E+0
WDP	m3 depriv.	4.98E-1	5.19E-4	2.80E-1	7.79E-1	1.82E-4	2.39E-2	2.46E-5	-3.11E-1	4.92E-1
PM	disease inc.	1.49E-8	9.95E-10	8.25E-10	1.67E-8	3.49E-10	3.12E-9	2.28E-11	-1.05E-8	9.66E-9
IR	kBq U-235 eq	1.96E-2	7.40E-4	3.99E-4	2.08E-2	2.60E-4	2.33E-3	1.51E-5	-1.13E-2	1.21E-2
ETP-fw	CTUe	1.52E+1	1.37E-1	1.33E-1	1.55E+1	4.82E-2	4.65E+0	5.04E-2	-6.64E+0	1.36E+1
HTP-c	CTUh	3.27E-10	4.89E-12	1.02E-11	3.42E-10	1.72E-12	7.64E-11	9.27E-14	-1.48E-10	2.72E-10
HTP-nc	CTUh	9.54E-9	1.64E-10	2.65E-10	9.96E-9	5.75E-11	1.69E-9	9.72E-12	-4.26E-9	7.46E-9
SQP	Pt	1.08E+1	1.45E-1	6.72E-1	1.16E+1	5.08E-2	4.00E-1	8.44E-3	-1.65E+1	-4.37E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.92E+0	2.43E-3	1.71E-1	2.10E+0	8.52E-4	4.47E-2	1.20E-4	-2.88E+0	-7.33E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.92E+0	2.43E-3	1.71E-1	2.10E+0	8.52E-4	4.47E-2	1.20E-4	-2.88E+0	-7.33E-1
PENRE	MJ	8.67E+0	1.80E-1	1.51E-1	9.00E+0	6.31E-2	6.91E-1	3.51E-3	-4.88E+0	4.88E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.67E+0	1.80E-1	1.51E-1	9.00E+0	6.31E-2	6.91E-1	3.51E-3	-4.88E+0	4.88E+0
PET	MJ	1.06E+1	1.82E-1	3.22E-1	1.11E+1	6.39E-2	7.35E-1	3.63E-3	-7.75E+0	4.15E+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	6.12E-3	1.92E-5	6.56E-3	1.27E-2	6.72E-6	6.63E-4	4.04E-6	-4.52E-3	8.85E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.61E-5	4.33E-7	2.05E-7	5.68E-5	1.52E-7	1.11E-6	4.05E-9	-4.35E-6	5.37E-5
NHWD	kg	4.32E-2	1.05E-2	1.50E-3	5.52E-2	3.68E-3	2.41E-2	1.47E-2	-2.00E-2	7.76E-2
RWD	kg	1.78E-5	1.15E-6	4.15E-7	1.94E-5	4.04E-7	2.58E-6	2.15E-8	-1.04E-5	1.20E-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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