

# Environmental Profile

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

Ecochain v3.5.80



Product: 3026000 - PVC Coupler GY 80 S/S BC  
 Unit: 1 Piece  
 Manufacturer: Wavin - FR - Varennes

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



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.

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

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# Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.51E-1	5.62E-3	7.33E-3	1.64E-1	2.24E-3	1.20E-1	6.91E-4	-8.56E-2	2.02E-1
GWP-f	kg CO2 eq	1.95E-1	5.61E-3	5.77E-3	2.06E-1	2.24E-3	6.26E-2	6.91E-4	-1.12E-1	1.60E-1
GWP-b	kg CO2 eq	-4.38E-2	3.41E-6	1.56E-3	-4.22E-2	1.36E-6	5.74E-2	8.68E-7	2.62E-2	4.15E-2
GWP-luluc	kg CO2 eq	3.22E-4	1.99E-6	5.57E-6	3.30E-4	7.92E-7	2.81E-5	1.86E-8	-2.69E-4	9.03E-5
ODP	kg CFC11 eq	9.57E-8	1.29E-9	7.53E-10	9.77E-8	5.16E-10	7.84E-9	2.62E-11	-4.90E-8	5.71E-8
AP	mol H+ eq	9.65E-4	3.20E-5	3.30E-5	1.03E-3	1.27E-5	1.40E-4	6.36E-7	-5.15E-4	6.69E-4
EP-fw	kg P eq	9.78E-6	4.62E-8	1.38E-7	9.97E-6	1.84E-8	9.41E-7	8.35E-10	-6.01E-6	4.91E-6
EP-m	kg N eq	1.92E-4	1.14E-5	9.63E-6	2.13E-4	4.56E-6	3.58E-5	3.88E-7	-1.00E-4	1.53E-4
EP-T	mol N eq	2.04E-3	1.26E-4	1.16E-4	2.29E-3	5.03E-5	3.94E-4	2.54E-6	-1.11E-3	1.63E-3
POCP	kg NMVOC eq	6.28E-4	3.60E-5	2.85E-5	6.92E-4	1.44E-5	1.18E-4	8.71E-7	-3.52E-4	4.74E-4
ADP-mm	kg Sb eq	1.97E-4	1.45E-7	1.15E-7	1.98E-4	5.79E-8	5.57E-7	6.40E-10	-2.17E-6	1.96E-4
ADP-f	MJ	4.64E+0	8.62E-2	8.04E-2	4.81E+0	3.43E-2	3.72E-1	1.91E-3	-2.57E+0	2.64E+0
WDP	m3 depriv.	2.86E-1	2.64E-4	1.61E-1	4.48E-1	1.05E-4	1.39E-2	1.35E-5	-1.73E-1	2.89E-1
PM	disease inc.	8.16E-9	5.07E-10	4.79E-10	9.14E-9	2.02E-10	1.77E-9	1.31E-11	-5.55E-9	5.58E-9
IR	kBq U-235 eq	1.12E-2	3.77E-4	2.30E-4	1.18E-2	1.50E-4	1.33E-3	8.75E-6	-6.24E-3	7.03E-3
ETP-fw	CTUe	7.96E+0	7.00E-2	7.73E-2	8.11E+0	2.79E-2	2.70E+0	2.94E-2	-3.49E+0	7.38E+0
HTP-c	CTUh	1.77E-10	2.49E-12	5.91E-12	1.85E-10	9.92E-13	4.31E-11	5.30E-14	-8.07E-11	1.49E-10
HTP-nc	CTUh	5.24E-9	8.34E-11	1.54E-10	5.48E-9	3.32E-11	9.71E-10	5.66E-12	-2.36E-9	4.13E-9
SQP	Pt	5.48E+0	7.37E-2	3.95E-1	5.95E+0	2.94E-2	2.29E-1	4.88E-3	-8.26E+0	-2.05E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.89E-1	1.24E-3	1.01E-1	1.09E+0	4.93E-4	2.58E-2	6.98E-5	-1.45E+0	-3.34E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.89E-1	1.24E-3	1.01E-1	1.09E+0	4.93E-4	2.58E-2	6.98E-5	-1.45E+0	-3.34E-1
PENRE	MJ	4.98E+0	9.15E-2	8.69E-2	5.15E+0	3.65E-2	3.96E-1	2.03E-3	-2.76E+0	2.83E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.98E+0	9.15E-2	8.69E-2	5.15E+0	3.65E-2	3.96E-1	2.03E-3	-2.76E+0	2.83E+0
PET	MJ	5.97E+0	9.27E-2	1.87E-1	6.25E+0	3.70E-2	4.22E-1	2.10E-3	-4.21E+0	2.49E+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	3.44E-3	9.75E-6	3.78E-3	7.23E-3	3.89E-6	3.84E-4	2.33E-6	-2.45E-3	5.17E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.85E-5	2.20E-7	1.18E-7	2.88E-5	8.78E-8	6.29E-7	2.33E-9	-2.43E-6	2.71E-5
NHWD	kg	2.36E-2	5.34E-3	8.66E-4	2.98E-2	2.13E-3	1.37E-2	8.51E-3	-1.10E-2	4.32E-2
RWD	kg	1.02E-5	5.86E-7	2.39E-7	1.10E-5	2.34E-7	1.47E-6	1.24E-8	-5.70E-6	7.03E-6
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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