Environmental Profile

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

Ecochain v3.5.80

Product:	3025937 - PVC Coupler GY 63 S/S 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	1.09E-1	4.33E-3	6.32E-3	1.19E-1	1.53E-3	1.07E-1	4.74E-4	-5.15E-2	1.76E-1
GWP-f	kg CO2 eq	1.53E-1	4.33E-3	4.74E-3	1.62E-1	1.53E-3	4.44E-2	4.74E-4	-8.84E-2	1.20E-1
GWP-b	kg CO2 eq	-4.41E-2	2.63E-6	1.57E-3	-4.25E-2	9.27E-7	6.22E-2	5.91E-7	3.72E-2	5.68E-2
GWP-luluc	kg CO2 eq	3.36E-4	1.53E-6	7.37E-6	3.45E-4	5.40E-7	1.96E-5	1.29E-8	-3.24E-4	4.09E-5
ODP	kg CFC11 eq	6.77E-8	9.98E-10	6.44E-10	6.93E-8	3.52E-10	5.59E-9	1.79E-11	-3.51E-8	4.01E-8
AP	mol H+ eq	7.72E-4	2.47E-5	3.85E-5	8.36E-4	8.70E-6	1.05E-4	4.35E-7	-4.55E-4	4.95E-4
EP-fw	kg P eq	7.99E-6	3.56E-8	1.18E-7	8.14E-6	1.26E-8	6.59E-7	5.75E-10	-5.86E-6	2.95E-6
EP-m	kg N eq	1.68E-4	8.83E-6	1.05E-5	1.88E-4	3.11E-6	2.80E-5	2.64E-7	-9.28E-5	1.26E-4
EP-T	mol N eq	1.76E-3	9.73E-5	1.40E-4	2.00E-3	3.43E-5	3.08E-4	1.73E-6	-1.04E-3	1.30E-3
POCP	kg NMVOC eq	5.14E-4	2.78E-5	3.10E-5	5.73E-4	9.80E-6	9.22E-5	5.96E-7	-3.14E-4	3.61E-4
ADP-mm	kg Sb eq	1.48E-4	1.12E-7	1.60E-7	1.48E-4	3.95E-8	4.20E-7	4.39E-10	-1.64E-6	1.47E-4
ADP-f	MJ	3.46E+0	6.65E-2	6.41E-2	3.59E+0	2.34E-2	2.72E-1	1.31E-3	-1.96E+0	1.93E+0
WDP	m3 depriv.	2.01E-1	2.04E-4	1.09E-1	3.11E-1	7.19E-5	9.55E-3	9.76E-6	-1.46E-1	1.74E-1
PM	disease inc.	7.41E-9	3.91E-10	5.24E-10	8.33E-9	1.38E-10	1.35E-9	8.98E-12	-5.87E-9	3.97E-9
IR	kBq U-235 eq	8.66E-3	2.91E-4	1.64E-4	9.12E-3	1.02E-4	9.88E-4	5.97E-6	-5.54E-3	4.67E-3
ETP-fw	CTUe	8.00E+0	5.40E-2	9.22E-2	8.14E+0	1.90E-2	1.86E+0	1.99E-2	-3.90E+0	6.15E+0
HTP-c	CTUh	1.39E-10	1.92E-12	5.75E-12	1.46E-10	6.77E-13	3.26E-11	3.66E-14	-7.15E-11	1.08E-10
HTP-nc	CTUh	3.96E-9	6.43E-11	1.69E-10	4.19E-9	2.27E-11	6.92E-10	3.83E-12	-2.03E-9	2.88E-9
SQP	Pt	5.73E+0	5.69E-2	6.98E-1	6.49E+0	2.00E-2	1.67E-1	3.33E-3	-1.01E+1	-3.44E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.01E+0	9.54E-4	1.77E-1	1.19E+0	3.36E-4	1.81E-2	4.74E-5	-1.77E+0	-5.62E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.01E+0	9.54E-4	1.77E-1	1.19E+0	3.36E-4	1.81E-2	4.74E-5	-1.77E+0	-5.62E-1
PENRE	MJ	3.71E+0	7.06E-2	6.92E-2	3.85E+0	2.49E-2	2.89E-1	1.39E-3	-2.11E+0	2.06E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.71E+0	7.06E-2	6.92E-2	3.85E+0	2.49E-2	2.89E-1	1.39E-3	-2.11E+0	2.06E+0
PET	MJ	4.73E+0	7.15E-2	2.46E-1	5.04E+0	2.52E-2	3.07E-1	1.43E-3	-3.88E+0	1.50E+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	2.60E-3	7.52E-6	2.57E-3	5.18E-3	2.65E-6	2.68E-4	1.59E-6	-2.41E-3	3.04E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.15E-5	1.70E-7	7.97E-8	2.18E-5	5.99E-8	4.78E-7	1.60E-9	-1.97E-6	2.04E-5
NHWD	kg	2.01E-2	4.12E-3	5.87E-4	2.48E-2	1.45E-3	1.02E-2	5.81E-3	-9.57E-3	3.27E-2
RWD	kg	8.12E-6	4.52E-7	1.61E-7	8.73E-6	1.59E-7	1.12E-6	8.48E-9	-5.13E-6	4.88E-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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