Environmental Profile

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

Ecochain v3.5.80

Product:	3025728 - PVC Adaptor GY 32 SC/CH 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	9.22E-2	2.99E-3	9.03E-3	1.04E-1	1.17E-3	7.38E-2	3.86E-4	-4.52E-2	1.34E-1
GWP-f	kg CO2 eq	1.14E-1	2.99E-3	6.21E-3	1.23E-1	1.17E-3	4.27E-2	3.86E-4	-6.36E-2	1.04E-1
GWP-b	kg CO2 eq	-2.20E-2	1.82E-6	2.80E-3	-1.92E-2	7.12E-7	3.11E-2	4.66E-7	1.85E-2	3.04E-2
GWP-luluc	kg CO2 eq	2.05E-4	1.06E-6	1.68E-5	2.23E-4	4.15E-7	1.41E-5	1.04E-8	-1.72E-4	6.54E-5
ODP	kg CFC11 eq	4.96E-8	6.89E-10	9.09E-10	5.12E-8	2.70E-10	3.92E-9	1.42E-11	-2.55E-8	2.99E-8
AP	mol H+ eq	5.86E-4	1.70E-5	7.98E-5	6.83E-4	6.68E-6	7.37E-5	3.46E-7	-2.88E-4	4.76E-4
EP-fw	kg P eq	5.72E-6	2.46E-8	1.66E-7	5.91E-6	9.65E-9	4.71E-7	4.63E-10	-3.49E-6	2.90E-6
EP-m	kg N eq	1.18E-4	6.10E-6	2.03E-5	1.44E-4	2.39E-6	1.94E-5	2.36E-7	-5.73E-5	1.09E-4
EP-T	mol N eq	1.26E-3	6.72E-5	2.98E-4	1.63E-3	2.63E-5	2.14E-4	1.37E-6	-6.35E-4	1.23E-3
POCP	kg NMVOC eq	3.91E-4	1.92E-5	6.00E-5	4.70E-4	7.53E-6	6.38E-5	4.74E-7	-1.98E-4	3.44E-4
ADP-mm	kg Sb eq	1.50E-4	7.74E-8	3.81E-7	1.50E-4	3.03E-8	2.89E-7	3.50E-10	-1.23E-6	1.49E-4
ADP-f	MJ	2.70E+0	4.59E-2	7.91E-2	2.83E+0	1.80E-2	1.92E-1	1.03E-3	-1.42E+0	1.62E+0
WDP	m3 depriv.	1.50E-1	1.41E-4	8.36E-2	2.34E-1	5.52E-5	6.93E-3	8.53E-6	-9.47E-2	1.46E-1
PM	disease inc.	5.34E-9	2.70E-10	1.02E-9	6.63E-9	1.06E-10	9.38E-10	7.11E-12	-3.31E-9	4.37E-9
IR	kBq U-235 eq	6.85E-3	2.01E-4	1.49E-4	7.20E-3	7.87E-5	6.87E-4	4.73E-6	-3.50E-3	4.47E-3
ETP-fw	CTUe	5.30E+0	3.73E-2	1.95E-1	5.53E+0	1.46E-2	1.33E+0	1.43E-2	-2.16E+0	4.73E+0
HTP-c	CTUh	1.06E-10	1.33E-12	9.82E-12	1.17E-10	5.20E-13	2.36E-11	2.95E-14	-4.39E-11	9.70E-11
HTP-nc	CTUh	3.09E-9	4.44E-11	3.32E-10	3.47E-9	1.74E-11	4.97E-10	2.81E-12	-1.29E-9	2.69E-9
SQP	Pt	3.03E+0	3.93E-2	1.88E+0	4.95E+0	1.54E-2	1.19E-1	2.63E-3	-5.10E+0	-1.55E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.53E-1	6.59E-4	4.75E-1	1.03E+0	2.58E-4	1.29E-2	3.75E-5	-9.01E-1	1.41E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.53E-1	6.59E-4	4.75E-1	1.03E+0	2.58E-4	1.29E-2	3.75E-5	-9.01E-1	1.41E-1
PENRE	MJ	2.90E+0	4.87E-2	8.49E-2	3.03E+0	1.91E-2	2.04E-1	1.10E-3	-1.53E+0	1.73E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.90E+0	4.87E-2	8.49E-2	3.03E+0	1.91E-2	2.04E-1	1.10E-3	-1.53E+0	1.73E+0
PET	MJ	3.45E+0	4.94E-2	5.60E-1	4.06E+0	1.94E-2	2.17E-1	1.14E-3	-2.43E+0	1.87E+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	1.99E-3	5.20E-6	1.98E-3	3.98E-3	2.04E-6	2.01E-4	1.26E-6	-1.43E-3	2.75E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.06E-5	1.17E-7	5.98E-8	2.08E-5	4.60E-8	3.36E-7	1.27E-9	-1.38E-6	1.98E-5
NHWD	kg	1.39E-2	2.85E-3	4.50E-4	1.72E-2	1.12E-3	7.47E-3	4.61E-3	-5.96E-3	2.45E-2
RWD	kg	6.67E-6	3.12E-7	1.21E-7	7.10E-6	1.22E-7	7.69E-7	6.72E-9	-3.23E-6	4.77E-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

Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
https://www.ecochain.com
+31 20 3035 777