Environmental Profile

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

Ecochain v3.5.80

Product:	4006019 - PVC Endcap Spigot GY 315
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	9.42E-1	3.42E-2	4.16E-2	1.02E+0	1.33E-2	5.03E-1	4.10E-3	-5.33E-1	1.01E+0
GWP-f	kg CO2 eq	1.04E+0	3.42E-2	3.32E-2	1.11E+0	1.32E-2	3.62E-1	4.10E-3	-5.88E-1	9.03E-1
GWP-b	kg CO2 eq	-1.04E-1	2.08E-5	8.40E-3	-9.52E-2	8.04E-6	1.40E-1	5.15E-6	5.67E-2	1.02E-1
GWP-luluc	kg CO2 eq	1.30E-3	1.21E-5	2.68E-5	1.34E-3	4.69E-6	1.64E-4	1.10E-7	-8.30E-4	6.79E-4
ODP	kg CFC11 eq	5.49E-7	7.88E-9	4.28E-9	5.61E-7	3.05E-9	4.50E-8	1.55E-10	-2.82E-7	3.28E-7
AP	mol H+ eq	5.12E-3	1.95E-4	1.68E-4	5.48E-3	7.54E-5	7.78E-4	3.77E-6	-2.45E-3	3.88E-3
EP-fw	kg P eq	5.17E-5	2.81E-7	7.83E-7	5.27E-5	1.09E-7	5.47E-6	4.94E-9	-2.62E-5	3.21E-5
EP-m	kg N eq	9.39E-4	6.97E-5	5.06E-5	1.06E-3	2.70E-5	1.92E-4	2.30E-6	-4.50E-4	8.31E-4
EP-T	mol N eq	1.02E-2	7.68E-4	5.85E-4	1.16E-2	2.97E-4	2.12E-3	1.50E-5	-4.88E-3	9.11E-3
POCP	kg NMVOC eq	3.22E-3	2.20E-4	1.50E-4	3.59E-3	8.50E-5	6.34E-4	5.16E-6	-1.62E-3	2.69E-3
ADP-mm	kg Sb eq	1.33E-3	8.84E-7	5.34E-7	1.33E-3	3.43E-7	3.08E-6	3.79E-9	-1.19E-5	1.32E-3
ADP-f	MJ	2.56E+1	5.25E-1	4.66E-1	2.66E+1	2.03E-1	2.10E+0	1.13E-2	-1.40E+1	1.49E+1
WDP	m3 depriv.	1.67E+0	1.61E-3	9.71E-1	2.64E+0	6.24E-4	8.16E-2	7.92E-5	-8.81E-1	1.85E+0
PM	disease inc.	3.67E-8	3.09E-9	2.51E-9	4.23E-8	1.20E-9	9.72E-9	7.79E-11	-2.08E-8	3.24E-8
IR	kBq U-235 eq	6.01E-2	2.29E-3	1.37E-3	6.37E-2	8.88E-4	7.44E-3	5.19E-5	-2.99E-2	4.22E-2
ETP-fw	CTUe	3.57E+1	4.26E-1	3.90E-1	3.65E+1	1.65E-1	1.59E+1	1.75E-1	-1.26E+1	4.01E+1
HTP-c	CTUh	9.70E-10	1.52E-11	3.23E-11	1.02E-9	5.87E-12	2.39E-10	3.14E-13	-3.66E-10	8.97E-10
HTP-nc	CTUh	3.03E-8	5.08E-10	8.03E-10	3.16E-8	1.97E-10	5.59E-9	3.36E-11	-1.16E-8	2.58E-8
SQP	Pt	1.55E+1	4.49E-1	1.57E+0	1.75E+1	1.74E-1	1.30E+0	2.89E-2	-2.03E+1	-1.30E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.16E+0	7.53E-3	4.01E-1	3.57E+0	2.92E-3	1.50E-1	4.14E-4	-3.74E+0	-2.08E-2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.16E+0	7.53E-3	4.01E-1	3.57E+0	2.92E-3	1.50E-1	4.14E-4	-3.74E+0	-2.08E-2
PENRE	MJ	2.74E+1	5.57E-1	5.04E-1	2.85E+1	2.16E-1	2.24E+0	1.20E-2	-1.51E+1	1.59E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.74E+1	5.57E-1	5.04E-1	2.85E+1	2.16E-1	2.24E+0	1.20E-2	-1.51E+1	1.59E+1
PET	MJ	3.06E+1	5.65E-1	9.05E-1	3.21E+1	2.19E-1	2.39E+0	1.24E-2	-1.88E+1	1.59E+1
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	1.92E-2	5.94E-5	2.27E-2	4.20E-2	2.30E-5	2.24E-3	1.38E-5	-1.06E-2	3.37E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.86E-4	1.34E-6	7.11E-7	1.88E-4	5.20E-7	3.46E-6	1.38E-8	-1.23E-5	1.80E-4
NHWD	kg	1.17E-1	3.25E-2	5.21E-3	1.55E-1	1.26E-2	7.68E-2	5.04E-2	-5.13E-2	2.44E-1
RWD	kg	5.26E-5	3.57E-6	1.44E-6	5.76E-5	1.38E-6	8.04E-6	7.36E-8	-2.69E-5	4.03E-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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