Environmental Profile

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

Ecochain v3.5.80

Product:	4006021 - PVC Endcap Spigot GY 400
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	2.04E+0	7.55E-2	8.97E-2	2.20E+0	2.94E-2	1.15E+0	9.11E-3	-1.20E+0	2.19E+0
GWP-f	kg CO2 eq	2.31E+0	7.54E-2	7.21E-2	2.46E+0	2.94E-2	8.03E-1	9.10E-3	-1.30E+0	2.00E+0
GWP-b	kg CO2 eq	-2.74E-1	4.58E-5	1.76E-2	-2.56E-1	1.79E-5	3.45E-1	1.15E-5	1.03E-1	1.92E-1
GWP-luluc	kg CO2 eq	2.78E-3	2.67E-5	5.17E-5	2.86E-3	1.04E-5	3.63E-4	2.44E-7	-1.70E-3	1.53E-3
ODP	kg CFC11 eq	1.22E-6	1.74E-8	9.24E-9	1.25E-6	6.78E-9	9.99E-8	3.45E-10	-6.25E-7	7.29E-7
AP	mol H+ eq	1.13E-2	4.30E-4	3.38E-4	1.21E-2	1.67E-4	1.72E-3	8.37E-6	-5.38E-3	8.56E-3
EP-fw	kg P eq	1.14E-4	6.21E-7	1.69E-6	1.16E-4	2.42E-7	1.21E-5	1.10E-8	-5.64E-5	7.19E-5
EP-m	kg N eq	2.06E-3	1.54E-4	1.04E-4	2.31E-3	5.99E-5	4.23E-4	5.12E-6	-9.86E-4	1.82E-3
EP-T	mol N eq	2.24E-2	1.69E-3	1.17E-3	2.53E-2	6.60E-4	4.67E-3	3.34E-5	-1.07E-2	2.00E-2
POCP	kg NMVOC eq	7.12E-3	4.84E-4	3.08E-4	7.91E-3	1.89E-4	1.40E-3	1.15E-5	-3.58E-3	5.93E-3
ADP-mm	kg Sb eq	2.90E-3	1.95E-6	1.00E-6	2.90E-3	7.61E-7	6.81E-6	8.41E-9	-2.63E-5	2.88E-3
ADP-f	MJ	5.66E+1	1.16E+0	1.02E+0	5.88E+1	4.51E-1	4.66E+0	2.52E-2	-3.10E+1	3.29E+1
WDP	m3 depriv.	3.71E+0	3.55E-3	2.17E+0	5.88E+0	1.39E-3	1.81E-1	1.74E-4	-1.93E+0	4.14E+0
PM	disease inc.	8.03E-8	6.81E-9	5.14E-9	9.23E-8	2.65E-9	2.15E-8	1.73E-10	-4.49E-8	7.16E-8
IR	kBq U-235 eq	1.32E-1	5.06E-3	3.04E-3	1.41E-1	1.97E-3	1.65E-2	1.15E-4	-6.54E-2	9.38E-2
ETP-fw	CTUe	7.62E+1	9.40E-1	7.81E-1	7.80E+1	3.66E-1	3.53E+1	3.89E-1	-2.65E+1	8.76E+1
HTP-c	CTUh	2.15E-9	3.35E-11	6.81E-11	2.25E-9	1.30E-11	5.27E-10	6.96E-13	-8.14E-10	1.98E-9
HTP-nc	CTUh	6.68E-8	1.12E-9	1.64E-9	6.96E-8	4.37E-10	1.24E-8	7.48E-11	-2.54E-8	5.71E-8
SQP	Pt	3.70E+1	9.91E-1	2.52E+0	4.05E+1	3.86E-1	2.87E+0	6.42E-2	-4.40E+1	-9.70E-2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.35E+0	1.66E-2	6.48E-1	8.02E+0	6.48E-3	3.33E-1	9.22E-4	-8.02E+0	3.37E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.35E+0	1.66E-2	6.48E-1	8.02E+0	6.48E-3	3.33E-1	9.22E-4	-8.02E+0	3.37E-1
PENRE	MJ	6.07E+1	1.23E+0	1.10E+0	6.31E+1	4.79E-1	4.96E+0	2.67E-2	-3.34E+1	3.52E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.07E+1	1.23E+0	1.10E+0	6.31E+1	4.79E-1	4.96E+0	2.67E-2	-3.34E+1	3.52E+1
PET	MJ	6.81E+1	1.25E+0	1.75E+0	7.11E+1	4.86E-1	5.29E+0	2.76E-2	-4.14E+1	3.55E+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	4.25E-2	1.31E-4	5.07E-2	9.33E-2	5.11E-5	4.98E-3	3.07E-5	-2.28E-2	7.56E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.08E-4	2.96E-6	1.59E-6	4.12E-4	1.15E-6	7.64E-6	3.07E-8	-2.73E-5	3.94E-4
NHWD	kg	2.59E-1	7.18E-2	1.16E-2	3.42E-1	2.80E-2	1.70E-1	1.12E-1	-1.14E-1	5.38E-1
RWD	kg	1.16E-4	7.88E-6	3.21E-6	1.27E-4	3.07E-6	1.78E-5	1.64E-7	-5.86E-5	8.91E-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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