Environmental Profile

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

Ecochain v3.5.80

Product:	3025782 - PVC Endcap Socket GY 100
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	2.38E-1	9.03E-3	1.20E-2	2.59E-1	3.27E-3	1.53E-1	1.02E-3	-1.23E-1	2.94E-1
GWP-f	kg CO2 eq	2.80E-1	9.02E-3	9.23E-3	2.99E-1	3.26E-3	9.12E-2	1.02E-3	-1.59E-1	2.35E-1
GWP-b	kg CO2 eq	-4.28E-2	5.48E-6	2.77E-3	-4.00E-2	1.98E-6	6.21E-2	1.27E-6	3.67E-2	5.88E-2
GWP-luluc	kg CO2 eq	4.58E-4	3.19E-6	1.16E-5	4.73E-4	1.16E-6	4.06E-5	2.76E-8	-3.71E-4	1.43E-4
ODP	kg CFC11 eq	1.37E-7	2.08E-9	1.23E-9	1.41E-7	7.52E-10	1.13E-8	3.83E-11	-7.13E-8	8.14E-8
AP	mol H+ eq	1.40E-3	5.14E-5	6.37E-5	1.52E-3	1.86E-5	2.02E-4	9.32E-7	-7.27E-4	1.01E-3
EP-fw	kg P eq	1.42E-5	7.43E-8	2.25E-7	1.45E-5	2.69E-8	1.36E-6	1.23E-9	-8.52E-6	7.40E-6
EP-m	kg N eq	2.76E-4	1.84E-5	1.79E-5	3.12E-4	6.65E-6	5.14E-5	5.64E-7	-1.40E-4	2.31E-4
EP-T	mol N eq	2.96E-3	2.03E-4	2.29E-4	3.39E-3	7.33E-5	5.66E-4	3.71E-6	-1.54E-3	2.49E-3
POCP	kg NMVOC eq	8.96E-4	5.79E-5	5.29E-5	1.01E-3	2.10E-5	1.70E-4	1.28E-6	-4.87E-4	7.11E-4
ADP-mm	kg Sb eq	3.44E-4	2.33E-7	2.47E-7	3.44E-4	8.44E-8	8.03E-7	9.41E-10	-3.12E-6	3.42E-4
ADP-f	MJ	6.64E+0	1.39E-1	1.27E-1	6.90E+0	5.01E-2	5.38E-1	2.80E-3	-3.70E+0	3.80E+0
WDP	m3 depriv.	4.16E-1	4.25E-4	2.36E-1	6.52E-1	1.54E-4	2.01E-2	2.13E-5	-2.50E-1	4.22E-1
PM	disease inc.	1.14E-8	8.15E-10	8.92E-10	1.31E-8	2.95E-10	2.56E-9	1.92E-11	-7.59E-9	8.36E-9
IR	kBq U-235 eq	1.61E-2	6.05E-4	3.43E-4	1.70E-2	2.19E-4	1.92E-3	1.28E-5	-8.89E-3	1.03E-2
ETP-fw	CTUe	1.19E+1	1.12E-1	1.51E-1	1.21E+1	4.07E-2	3.90E+0	4.24E-2	-4.90E+0	1.12E+1
HTP-c	CTUh	2.61E-10	4.00E-12	1.03E-11	2.75E-10	1.45E-12	6.32E-11	7.87E-14	-1.10E-10	2.30E-10
HTP-nc	CTUh	7.91E-9	1.34E-10	2.87E-10	8.33E-9	4.85E-11	1.41E-9	8.18E-12	-3.35E-9	6.44E-9
SQP	Pt	6.20E+0	1.19E-1	9.92E-1	7.31E+0	4.29E-2	3.31E-1	7.13E-3	-1.03E+1	-2.61E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.18E+0	1.99E-3	2.52E-1	1.43E+0	7.19E-4	3.73E-2	1.01E-4	-1.85E+0	-3.75E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.18E+0	1.99E-3	2.52E-1	1.43E+0	7.19E-4	3.73E-2	1.01E-4	-1.85E+0	-3.75E-1
PENRE	MJ	7.12E+0	1.47E-1	1.37E-1	7.40E+0	5.32E-2	5.72E-1	2.97E-3	-3.97E+0	4.06E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	7.12E+0	1.47E-1	1.37E-1	7.40E+0	5.32E-2	5.72E-1	2.97E-3	-3.97E+0	4.06E+0
PET	MJ	8.30E+0	1.49E-1	3.89E-1	8.84E+0	5.39E-2	6.09E-1	3.07E-3	-5.82E+0	3.69E+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	5.04E-3	1.57E-5	5.53E-3	1.06E-2	5.67E-6	5.55E-4	3.41E-6	-3.49E-3	7.65E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.85E-5	3.54E-7	1.72E-7	4.90E-5	1.28E-7	9.08E-7	3.43E-9	-3.41E-6	4.67E-5
NHWD	kg	3.37E-2	8.59E-3	1.27E-3	4.36E-2	3.11E-3	1.99E-2	1.24E-2	-1.51E-2	6.39E-2
RWD	kg	1.45E-5	9.42E-7	3.48E-7	1.58E-5	3.41E-7	2.11E-6	1.82E-8	-8.08E-6	1.02E-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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