

Environmental Profile

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

Ecochain v3.5.80



Product: 3025769 - PVC Bend 67°3 GY 125 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					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												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

This document and supporting material contain confidential and proprietary business information of Wavin - FR - Varennes. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - FR - Varennes.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.66E-1	2.97E-2	3.57E-2	8.31E-1	1.11E-2	5.03E-1	3.44E-3	-4.39E-1	9.10E-1
GWP-f	kg CO2 eq	9.16E-1	2.97E-2	2.83E-2	9.74E-1	1.11E-2	3.06E-1	3.44E-3	-5.19E-1	7.75E-1
GWP-b	kg CO2 eq	-1.51E-1	1.80E-5	7.36E-3	-1.43E-1	6.73E-6	1.97E-1	4.31E-6	8.15E-2	1.35E-1
GWP-luluc	kg CO2 eq	1.32E-3	1.05E-5	2.47E-5	1.35E-3	3.92E-6	1.38E-4	9.24E-8	-9.63E-4	5.31E-4
ODP	kg CFC11 eq	4.65E-7	6.84E-9	3.67E-9	4.75E-7	2.55E-9	3.82E-8	1.30E-10	-2.39E-7	2.77E-7
AP	mol H+ eq	4.52E-3	1.69E-4	1.51E-4	4.84E-3	6.31E-5	6.70E-4	3.16E-6	-2.27E-3	3.31E-3
EP-fw	kg P eq	4.59E-5	2.44E-7	6.70E-7	4.68E-5	9.12E-8	4.62E-6	4.15E-9	-2.53E-5	2.62E-5
EP-m	kg N eq	8.63E-4	6.05E-5	4.48E-5	9.68E-4	2.26E-5	1.68E-4	1.93E-6	-4.29E-4	7.31E-4
EP-T	mol N eq	9.31E-3	6.67E-4	5.29E-4	1.05E-2	2.49E-4	1.85E-3	1.26E-5	-4.70E-3	7.92E-3
POCP	kg NMVOC eq	2.89E-3	1.91E-4	1.33E-4	3.22E-3	7.12E-5	5.53E-4	4.32E-6	-1.53E-3	2.32E-3
ADP-mm	kg Sb eq	1.13E-3	7.68E-7	5.00E-7	1.13E-3	2.87E-7	2.65E-6	3.18E-9	-1.03E-5	1.12E-3
ADP-f	MJ	2.20E+1	4.56E-1	3.96E-1	2.29E+1	1.70E-1	1.80E+0	9.48E-3	-1.22E+1	1.27E+1
WDP	m3 depriv.	1.41E+0	1.40E-3	8.12E-1	2.23E+0	5.22E-4	6.85E-2	6.70E-5	-7.89E-1	1.51E+0
PM	disease inc.	3.47E-8	2.68E-9	2.23E-9	3.96E-8	1.00E-9	8.41E-9	6.52E-11	-2.18E-8	2.73E-8
IR	kBq U-235 eq	5.24E-2	1.99E-3	1.15E-3	5.55E-2	7.44E-4	6.39E-3	4.34E-5	-2.76E-2	3.51E-2
ETP-fw	CTUe	3.46E+1	3.70E-1	3.52E-1	3.53E+1	1.38E-1	1.34E+1	1.46E-1	-1.34E+1	3.55E+1
HTP-c	CTUh	8.60E-10	1.32E-11	2.81E-11	9.02E-10	4.92E-12	2.06E-10	2.63E-13	-3.49E-10	7.64E-10
HTP-nc	CTUh	2.61E-8	4.41E-10	7.14E-10	2.73E-8	1.65E-10	4.74E-9	2.81E-11	-1.06E-8	2.17E-8
SQP	Pt	1.97E+1	3.90E-1	1.59E+0	2.17E+1	1.46E-1	1.11E+0	2.42E-2	-2.76E+1	-4.65E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.71E+0	6.54E-3	4.06E-1	4.12E+0	2.44E-3	1.27E-1	3.47E-4	-4.92E+0	-6.66E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.71E+0	6.54E-3	4.06E-1	4.12E+0	2.44E-3	1.27E-1	3.47E-4	-4.92E+0	-6.66E-1
PENRE	MJ	2.36E+1	4.84E-1	4.28E-1	2.45E+1	1.81E-1	1.91E+0	1.01E-2	-1.31E+1	1.35E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.36E+1	4.84E-1	4.28E-1	2.45E+1	1.81E-1	1.91E+0	1.01E-2	-1.31E+1	1.35E+1
PET	MJ	2.73E+1	4.90E-1	8.34E-1	2.87E+1	1.83E-1	2.04E+0	1.04E-2	-1.80E+1	1.29E+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	1.66E-2	5.16E-5	1.90E-2	3.57E-2	1.93E-5	1.89E-3	1.16E-5	-1.03E-2	2.74E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.59E-4	1.17E-6	5.95E-7	1.61E-4	4.35E-7	2.99E-6	1.16E-8	-1.11E-5	1.53E-4
NHWD	kg	1.07E-1	2.82E-2	4.36E-3	1.40E-1	1.05E-2	6.59E-2	4.21E-2	-4.81E-2	2.10E-1
RWD	kg	4.63E-5	3.10E-6	1.20E-6	5.06E-5	1.16E-6	6.96E-6	6.17E-8	-2.50E-5	3.38E-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



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