

Environmental Profile

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

Ecochain v3.5.80



Product: 3026012 - PVC Branch 87°3 GY 32 S/S/SP BC
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

With the PVC range to be glued Wavin, you benefit from a complete choice of pipes and fittings 100% compatible, in all standard sizes on the market, from 32 to 315mm. This system includes a wide range of special accessories: branch saddles, flexible connectors, etc. Certified quality: Wavin glue-on PVC products benefit from the necessary certifications in France (NF-E).

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
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 - PL -Buk - Extra products (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 - PL -Buk - Extra products. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - PL -Buk - Extra products.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.05E-1	9.71E-3	1.45E-4	1.15E-1	1.42E-3	8.67E-2	4.42E-4	-6.92E-2	1.34E-1
GWP-f	kg CO2 eq	1.37E-1	9.70E-3	1.46E-4	1.47E-1	1.42E-3	5.06E-2	4.42E-4	-7.50E-2	1.24E-1
GWP-b	kg CO2 eq	-3.23E-2	5.89E-6	-1.54E-6	-3.23E-2	8.63E-7	3.60E-2	5.75E-7	5.87E-3	9.58E-3
GWP-luluc	kg CO2 eq	1.49E-4	3.43E-6	1.49E-7	1.53E-4	5.03E-7	1.86E-5	1.12E-8	-9.93E-5	7.23E-5
ODP	kg CFC11 eq	6.54E-8	2.24E-9	8.26E-12	6.76E-8	3.28E-10	5.24E-9	1.68E-11	-3.23E-8	4.10E-8
AP	mol H+ eq	6.24E-4	5.53E-5	1.47E-6	6.81E-4	8.10E-6	8.98E-5	4.06E-7	-2.94E-4	4.85E-4
EP-fw	kg P eq	5.94E-6	7.99E-8	8.24E-9	6.03E-6	1.17E-8	6.26E-7	5.15E-10	-3.01E-6	3.66E-6
EP-m	kg N eq	1.14E-4	1.98E-5	1.55E-7	1.34E-4	2.90E-6	2.24E-5	2.58E-7	-5.62E-5	1.03E-4
EP-T	mol N eq	1.22E-3	2.18E-4	1.85E-6	1.44E-3	3.19E-5	2.47E-4	1.62E-6	-6.14E-4	1.10E-3
POCP	kg NMVOC eq	4.23E-4	6.23E-5	6.28E-7	4.86E-4	9.13E-6	7.34E-5	5.57E-7	-2.07E-4	3.62E-4
ADP-mm	kg Sb eq	3.49E-6	2.51E-7	1.97E-8	3.76E-6	3.68E-8	3.49E-7	4.01E-10	-1.37E-6	2.78E-6
ADP-f	MJ	3.37E+0	1.49E-1	1.36E-3	3.52E+0	2.18E-2	2.37E-1	1.22E-3	-1.72E+0	2.06E+0
WDP	m3 depriv.	2.00E-1	4.57E-4	5.22E-5	2.01E-1	6.70E-5	9.41E-3	5.60E-6	-9.84E-2	1.12E-1
PM	disease inc.	4.93E-9	8.76E-10	9.08E-12	5.82E-9	1.28E-10	1.10E-9	8.43E-12	-2.67E-9	4.39E-9
IR	kBq U-235 eq	6.93E-3	6.51E-4	1.02E-6	7.59E-3	9.54E-5	8.48E-4	5.67E-6	-3.47E-3	5.07E-3
ETP-fw	CTUe	3.03E+0	1.21E-1	1.21E-2	3.16E+0	1.77E-2	1.86E+0	2.05E-2	-1.46E+0	3.60E+0
HTP-c	CTUh	9.84E-11	4.30E-12	6.17E-13	1.03E-10	6.30E-13	2.62E-11	3.22E-14	-4.82E-11	8.19E-11
HTP-nc	CTUh	2.87E-9	1.44E-10	1.57E-11	3.03E-9	2.11E-11	6.46E-10	3.90E-12	-1.34E-9	2.36E-9
SQP	Pt	3.46E+0	1.27E-1	2.24E-3	3.59E+0	1.87E-2	1.44E-1	3.15E-3	-3.63E+0	1.32E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.79E-1	2.14E-3	2.40E-2	9.06E-1	3.13E-4	1.71E-2	4.70E-5	-6.19E-1	3.04E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.79E-1	2.14E-3	2.40E-2	9.06E-1	3.13E-4	1.71E-2	4.70E-5	-6.19E-1	3.04E-1
PENRE	MJ	3.62E+0	1.58E-1	1.44E-3	3.78E+0	2.32E-2	2.53E-1	1.30E-3	-1.86E+0	2.20E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.62E+0	1.58E-1	1.44E-3	3.78E+0	2.32E-2	2.53E-1	1.30E-3	-1.86E+0	2.20E+0
PET	MJ	4.50E+0	1.60E-1	2.55E-2	4.68E+0	2.35E-2	2.70E-1	1.35E-3	-2.48E+0	2.50E+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	2.30E-3	1.69E-5	1.46E-6	2.32E-3	2.47E-6	2.60E-4	1.51E-6	-1.20E-3	1.39E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.71E-6	3.81E-7	2.73E-13	3.09E-6	5.58E-8	3.92E-7	1.47E-9	-1.61E-6	1.92E-6
NHWD	kg	1.42E-2	9.23E-3	1.05E-6	2.35E-2	1.35E-3	9.00E-3	5.41E-3	-6.51E-3	3.27E-2
RWD	kg	6.22E-6	1.01E-6	1.10E-13	7.23E-6	1.48E-7	9.12E-7	7.99E-9	-3.16E-6	5.14E-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