

Environmental Profile

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

Ecochain v4.3.1



Product: 2901576 - UNION ALC 110MM(4) NOVAFORT
Unit: 1 piece
Manufacturer: Wavin - CO - Bogotá
Location: Colombia
Address: Autopista Sur # 71-75
Bogotá
Colombia

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.8 Cut-Off
Externally verified: Yes
Issue date: 21-06-2024
End of validity: 21-06-2029
Verifier: Martijn van Hövell - SGS Search



Novafort Pavco Wavin son tuberías fabricadas con tecnología de punta y materia prima de primera calidad. Millones de metros instalados exitosamente alrededor del mundo son la prueba de su efectividad y funcionalidad al convertirse en parte integral de las redes de infraestructura. Los Tubosistemas para alcantarillado Pavco Wavin Novafort son tuberías de pared estructural de PVC con superficie interior lisa y exterior corrugada.

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 - CO - Bogotá (2022). (☑ = 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]; **PENRE** = 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.31E-1	4.20E-2	6.57E-3	7.80E-1	3.32E-3	3.39E-3	2.51E-2	-1.05E-3	8.11E-1
GWP-f	kg CO2 eq	7.28E-1	4.17E-2	5.87E-3	7.75E-1	3.32E-3	2.69E-5	2.50E-2	0	8.04E-1
GWP-b	kg CO2 eq	2.93E-3	1.10E-4	6.98E-4	3.74E-3	2.20E-6	3.36E-3	3.27E-5	-1.05E-3	6.08E-3
GWP-luluc	kg CO2 eq	6.67E-4	2.82E-4	3.91E-6	9.52E-4	1.42E-6	3.06E-8	3.24E-6	0	9.57E-4
ODP	kg CFC11 eq	3.08E-7	8.80E-9	4.85E-10	3.17E-7	7.35E-10	3.65E-12	9.48E-10	0	3.19E-7
AP	mol H+ eq	3.54E-3	2.85E-4	1.99E-5	3.85E-3	1.83E-5	2.60E-7	2.70E-5	0	3.89E-3
EP-fw	kg P eq	2.62E-5	4.66E-7	3.23E-7	2.70E-5	2.91E-8	6.62E-10	5.01E-8	0	2.70E-5
EP-m	kg N eq	6.32E-4	9.39E-5	1.04E-5	7.36E-4	6.34E-6	1.68E-6	1.48E-5	0	7.59E-4
EP-T	mol N eq	6.82E-3	1.02E-3	5.68E-5	7.90E-3	6.98E-5	5.48E-7	9.91E-5	0	8.07E-3
POCP	kg NMVOC eq	2.17E-3	2.90E-4	1.77E-5	2.48E-3	2.01E-5	6.98E-7	3.38E-5	0	2.53E-3
ADP-mm	kg Sb eq	2.70E-5	1.38E-7	3.03E-8	2.72E-5	1.11E-8	7.80E-11	1.03E-8	0	2.72E-5
ADP-f	MJ	1.50E+1	6.22E-1	6.11E-2	1.57E+1	4.97E-2	3.80E-4	7.36E-2	0	1.58E+1
WDP	m3 depriv.	3.96E-1	2.39E-3	4.73E-3	4.03E-1	1.86E-4	1.28E-5	3.19E-3	0	4.07E-1
PM	disease inc.	3.08E-8	4.37E-9	4.26E-10	3.56E-8	3.53E-10	2.40E-12	5.27E-10	0	3.64E-8
IR	kBq U-235 eq	1.89E-2	2.61E-3	1.33E-4	2.17E-2	2.05E-4	1.54E-6	2.87E-4	0	2.22E-2
ETP-fw	CTUe	2.06E+1	5.46E-1	1.81E-1	2.13E+1	4.36E-2	4.72E-3	1.05E+0	0	2.24E+1
HTP-c	CTUh	5.95E-10	2.03E-11	1.01E-11	6.26E-10	1.56E-12	1.99E-14	2.57E-12	0	6.30E-10
HTP-nc	CTUh	1.58E-8	5.70E-10	9.54E-11	1.65E-8	4.57E-11	3.62E-12	2.07E-10	0	1.67E-8
SQP	Pt	2.05E+0	5.40E-1	2.23E-2	2.61E+0	4.18E-2	6.39E-4	1.74E-1	0	2.83E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.99E-1	1.04E-2	1.23E+0	1.84E+0	5.98E-4	2.01E-5	1.30E-3	0	1.84E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.99E-1	1.04E-2	1.23E+0	1.84E+0	5.98E-4	2.01E-5	1.30E-3	0	1.84E+0
PENRE	MJ	1.61E+1	6.62E-1	6.59E-2	1.68E+1	5.28E-2	4.04E-4	7.82E-2	0	1.70E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.61E+1	6.62E-1	6.59E-2	1.68E+1	5.28E-2	4.04E-4	7.82E-2	0	1.70E+1
PET	MJ	1.67E+1	6.73E-1	1.30E+0	1.87E+1	5.34E-2	4.24E-4	7.95E-2	0	1.88E+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	1.02E-2	8.10E-5	1.23E-4	1.04E-2	6.02E-6	3.44E-7	7.75E-5	0	1.05E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.96E-5	1.58E-6	1.43E-7	9.14E-5	1.27E-7	4.61E-10	1.13E-7	0	9.16E-5
NHWD	kg	8.13E-2	4.13E-2	4.79E-3	1.27E-1	3.26E-3	1.05E-3	3.00E-1	0	4.31E-1
RWD	kg	1.59E-5	4.10E-6	1.61E-7	2.02E-5	3.23E-7	1.91E-9	4.38E-7	0	2.09E-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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