

Environmental Profile

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

Ecochain v3.5.80



Product: 3085206 - PVC Vent.Duct BL 80x1.5 L=4 Round
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

LCA standard: NMD Bepalingsmethode 1.1 (2022)
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



With the new Ventiza air distribution system, Wavin offers a solution from the ventilation to the valve. A good indoor climate is arranged in no time!

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 - NL - Hardenberg - Verified (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

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **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

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Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.53	0.01	0.02	0.56	0.01	0.17	0	-0.25	0.49
ADPE	kg Sb-eq	2.64E-3	1.92E-6	4.05E-6	2.64E-3	1.58E-6	1.38E-5	1.73E-8	-5.18E-5	2.61E-3
ADPF	kg Sb-eq	5.74E-2	5.53E-4	1.09E-3	5.91E-2	4.46E-4	4.83E-3	2.41E-5	-2.96E-2	3.48E-2
GWP	kg CO2-eq	4.87E+0	7.53E-2	1.93E-1	5.14E+0	6.07E-2	1.71E+0	1.61E-2	-2.50E+0	4.43E+0
ODP	kg CFC-11-eq	2.49E-6	1.34E-8	1.81E-8	2.52E-6	1.13E-8	2.01E-7	5.76E-10	-1.29E-6	1.45E-6
POCP	kg ethene-eq	3.17E-3	4.54E-5	8.51E-5	3.30E-3	3.64E-5	3.79E-4	4.20E-6	-1.27E-3	2.45E-3
AP	kg SO2-eq	1.99E-2	3.31E-4	7.58E-4	2.09E-2	2.61E-4	2.81E-3	1.29E-5	-8.12E-3	1.59E-2
EP	kg PO4 3--eq	2.36E-3	6.50E-5	1.20E-4	2.54E-3	5.22E-5	4.26E-4	5.08E-6	-9.97E-4	2.03E-3
HTP	kg 1,4-DB-eq	1.73E+0	3.17E-2	7.29E-2	1.84E+0	2.60E-2	7.39E-1	1.35E-3	-7.88E-1	1.81E+0
FAETP	kg 1,4-DB-eq	4.28E-2	9.25E-4	2.97E-3	4.67E-2	7.60E-4	1.14E-2	4.14E-4	-1.72E-2	4.21E-2
MAETP	kg 1,4-DB-eq	1.18E+2	3.33E+0	1.21E+1	1.33E+2	2.72E+0	3.75E+1	5.05E-1	-5.05E+1	1.23E+2
TETP	kg 1,4-DB-eq	1.22E-2	1.12E-4	4.53E-3	1.68E-2	9.20E-5	2.64E-3	4.53E-6	-5.72E-3	1.38E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.53E+0	7.60E-2	2.28E-1	4.83E+0	6.12E-2	2.24E+0	1.87E-2	-2.58E+0	4.57E+0
GWP-f	kg CO2 eq	5.00E+0	7.59E-2	1.78E-1	5.26E+0	6.12E-2	1.72E+0	1.87E-2	-2.56E+0	4.50E+0
GWP-b	kg CO2 eq	-4.81E-1	3.50E-5	3.85E-2	-4.42E-1	3.71E-5	5.17E-1	2.38E-5	-1.77E-2	5.74E-2
GWP-luluc	kg CO2 eq	4.02E-3	2.78E-5	1.09E-2	1.49E-2	2.17E-5	7.56E-4	4.95E-7	-1.71E-3	1.40E-2
ODP	kg CFC11 eq	2.46E-6	1.68E-8	2.15E-8	2.50E-6	1.41E-8	2.07E-7	7.16E-10	-1.27E-6	1.44E-6
AP	mol H+ eq	2.39E-2	4.40E-4	9.72E-4	2.53E-2	3.48E-4	3.53E-3	1.73E-5	-9.82E-3	1.94E-2
EP-fw	kg P eq	2.22E-4	7.66E-7	2.55E-6	2.25E-4	5.03E-7	2.53E-5	2.24E-8	-9.40E-5	1.57E-4
EP-m	kg N eq	4.14E-3	1.55E-4	2.86E-4	4.58E-3	1.25E-4	8.61E-4	1.07E-5	-1.73E-3	3.85E-3
EP-T	mol N eq	4.35E-2	1.71E-3	3.07E-3	4.83E-2	1.37E-3	9.50E-3	6.92E-5	-1.87E-2	4.05E-2
POCP	kg NMVOC eq	1.52E-2	4.88E-4	8.67E-4	1.66E-2	3.93E-4	2.84E-3	2.37E-5	-6.33E-3	1.35E-2
ADP-mm	kg Sb eq	2.64E-3	1.92E-6	4.05E-6	2.64E-3	1.58E-6	1.38E-5	1.73E-8	-5.18E-5	2.61E-3
ADP-f	MJ	1.22E+2	1.14E+0	2.06E+0	1.25E+2	9.39E-1	9.55E+0	5.22E-2	-6.19E+1	7.37E+1
WDP	m3 depriv.	7.56E+0	4.09E-3	1.39E+0	8.95E+0	2.88E-3	3.80E-1	3.20E-4	-3.65E+0	5.69E+0
PM	disease inc.	1.81E-7	6.82E-9	1.51E-8	2.03E-7	5.52E-9	4.35E-8	3.59E-10	-6.47E-8	1.88E-7
IR	kBq U-235 eq	2.51E-1	4.80E-3	3.72E-3	2.59E-1	4.10E-3	3.36E-2	2.40E-4	-1.18E-1	1.79E-1
ETP-fw	CTUe	9.94E+1	1.02E+0	3.44E+0	1.04E+2	7.62E-1	7.41E+1	8.20E-1	-3.73E+1	1.42E+2
HTP-c	CTUh	3.59E-9	3.31E-11	1.17E-10	3.74E-9	2.71E-11	1.08E-9	1.41E-12	-1.37E-9	3.48E-9
HTP-nc	CTUh	1.14E-7	1.12E-9	3.59E-9	1.18E-7	9.09E-10	2.58E-8	1.57E-10	-4.71E-8	9.81E-8
SQP	Pt	6.19E+1	9.93E-1	1.54E-1	6.30E+1	8.03E-1	5.88E+0	1.33E-1	-1.66E+1	5.33E+1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.27E+1	1.43E-2	6.22E+0	1.90E+1	1.35E-2	6.94E-1	1.93E-3	-4.67E+0	1.50E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.27E+1	1.43E-2	6.22E+0	1.90E+1	1.35E-2	6.94E-1	1.93E-3	-4.67E+0	1.50E+1
PENRE	MJ	1.31E+2	1.22E+0	2.23E+0	1.34E+2	9.97E-1	1.02E+1	5.54E-2	-6.67E+1	7.88E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.31E+2	1.22E+0	2.23E+0	1.34E+2	9.97E-1	1.02E+1	5.54E-2	-6.67E+1	7.88E+1
PET	MJ	1.44E+2	1.23E+0	8.45E+0	1.53E+2	1.01E+0	1.09E+1	5.73E-2	-7.14E+1	9.38E+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	8.42E-2	1.39E-4	3.28E-2	1.17E-1	1.06E-4	1.04E-2	6.39E-5	-3.81E-2	8.96E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.11E-4	2.90E-6	2.89E-6	4.17E-4	2.40E-6	1.54E-5	6.33E-8	-5.18E-5	3.83E-4
NHWD	kg	4.64E-1	7.26E-2	4.17E-3	5.41E-1	5.82E-2	3.56E-1	2.33E-1	-1.98E-1	9.90E-1
RWD	kg	2.19E-4	7.52E-6	5.19E-6	2.31E-4	6.39E-6	3.58E-5	3.40E-7	-1.04E-4	1.69E-4
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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