

Environmental Profile

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

Ecochain v3.5.80



Product: 3085205 - PVC Vent.Duct BL 235 L=5 Oval
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	2.32	0.04	0.09	2.45	0.03	0.77	0	-1.1	2.15
ADPE	kg Sb-eq	1.16E-2	8.27E-6	1.70E-5	1.16E-2	7.03E-6	6.06E-5	7.73E-8	-2.29E-4	1.14E-2
ADPF	kg Sb-eq	2.53E-1	2.38E-3	4.55E-3	2.60E-1	1.98E-3	2.13E-2	1.07E-4	-1.32E-1	1.52E-1
GWP	kg CO2-eq	2.14E+1	3.24E-1	8.09E-1	2.25E+1	2.70E-1	7.63E+0	7.20E-2	-1.11E+1	1.94E+1
ODP	kg CFC-11-eq	1.09E-5	5.74E-8	7.60E-8	1.10E-5	5.00E-8	8.83E-7	2.56E-9	-5.69E-6	6.29E-6
POCP	kg ethene-eq	1.38E-2	1.95E-4	3.56E-4	1.44E-2	1.62E-4	1.66E-3	1.88E-5	-5.60E-3	1.06E-2
AP	kg SO2-eq	8.71E-2	1.42E-3	3.17E-3	9.16E-2	1.16E-3	1.23E-2	5.77E-5	-3.55E-2	6.96E-2
EP	kg PO4 3--eq	1.02E-2	2.80E-4	5.01E-4	1.10E-2	2.32E-4	1.85E-3	2.25E-5	-4.27E-3	8.83E-3
HTP	kg 1,4-DB-eq	7.55E+0	1.36E-1	3.05E-1	8.00E+0	1.15E-1	3.26E+0	6.03E-3	-3.45E+0	7.93E+0
FAETP	kg 1,4-DB-eq	1.90E-1	3.98E-3	1.24E-2	2.07E-1	3.38E-3	5.07E-2	1.89E-3	-7.56E-2	1.87E-1
MAETP	kg 1,4-DB-eq	5.16E+2	1.43E+1	5.07E+1	5.81E+2	1.21E+1	1.66E+2	2.30E+0	-2.22E+2	5.39E+2
TETP	kg 1,4-DB-eq	5.28E-2	4.82E-4	1.90E-2	7.22E-2	4.09E-4	1.17E-2	2.01E-5	-2.51E-2	5.92E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.17E+1	3.27E-1	9.53E-1	2.29E+1	2.72E-1	8.18E+0	8.39E-2	-1.14E+1	2.00E+1
GWP-f	kg CO2 eq	2.20E+1	3.27E-1	7.46E-1	2.30E+1	2.72E-1	7.69E+0	8.39E-2	-1.14E+1	1.97E+1
GWP-b	kg CO2 eq	-3.25E-1	1.51E-4	1.61E-1	-1.63E-1	1.65E-4	4.89E-1	1.06E-4	-7.07E-2	2.55E-1
GWP-luluc	kg CO2 eq	1.68E-2	1.20E-4	4.55E-2	6.24E-2	9.62E-5	3.33E-3	2.22E-6	-7.37E-3	5.85E-2
ODP	kg CFC11 eq	1.08E-5	7.21E-8	9.01E-8	1.09E-5	6.26E-8	9.08E-7	3.18E-9	-5.63E-6	6.25E-6
AP	mol H+ eq	1.05E-1	1.89E-3	4.07E-3	1.11E-1	1.55E-3	1.54E-2	7.72E-5	-4.28E-2	8.48E-2
EP-fw	kg P eq	9.66E-4	3.29E-6	1.07E-5	9.80E-4	2.24E-6	1.11E-4	1.00E-7	-4.14E-4	6.79E-4
EP-m	kg N eq	1.78E-2	6.67E-4	1.20E-3	1.97E-2	5.54E-4	3.73E-3	4.74E-5	-7.45E-3	1.66E-2
EP-T	mol N eq	1.87E-1	7.36E-3	1.29E-2	2.07E-1	6.11E-3	4.12E-2	3.08E-4	-7.96E-2	1.75E-1
POCP	kg NMVOC eq	6.57E-2	2.10E-3	3.63E-3	7.14E-2	1.75E-3	1.23E-2	1.06E-4	-2.75E-2	5.81E-2
ADP-mm	kg Sb eq	1.16E-2	8.27E-6	1.70E-5	1.16E-2	7.03E-6	6.06E-5	7.73E-8	-2.29E-4	1.14E-2
ADP-f	MJ	5.37E+2	4.92E+0	8.64E+0	5.51E+2	4.17E+0	4.21E+1	2.32E-1	-2.76E+2	3.21E+2
WDP	m3 depriv.	3.32E+1	1.76E-2	5.84E+0	3.91E+1	1.28E-2	1.67E+0	1.51E-3	-1.62E+1	2.46E+1
PM	disease inc.	7.18E-7	2.93E-8	6.32E-8	8.10E-7	2.45E-8	1.91E-7	1.60E-9	-2.74E-7	7.53E-7
IR	kBq U-235 eq	1.09E+0	2.06E-2	1.56E-2	1.12E+0	1.82E-2	1.48E-1	1.07E-3	-5.22E-1	7.68E-1
ETP-fw	CTUe	4.34E+2	4.39E+0	1.44E+1	4.52E+2	3.39E+0	3.25E+2	3.60E+0	-1.58E+2	6.26E+2
HTP-c	CTUh	1.52E-8	1.42E-10	4.91E-10	1.59E-8	1.21E-10	4.72E-9	6.35E-12	-5.96E-9	1.48E-8
HTP-nc	CTUh	4.96E-7	4.80E-9	1.50E-8	5.15E-7	4.04E-9	1.13E-7	6.91E-10	-2.06E-7	4.28E-7
SQP	Pt	1.10E+2	4.27E+0	6.46E-1	1.15E+2	3.57E+0	2.59E+1	5.93E-1	-3.97E+1	1.06E+2

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.18E+1	6.16E-2	2.60E+1	5.79E+1	5.99E-2	3.05E+0	8.55E-3	-1.39E+1	4.71E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.18E+1	6.16E-2	2.60E+1	5.79E+1	5.99E-2	3.05E+0	8.55E-3	-1.39E+1	4.71E+1
PENRE	MJ	5.76E+2	5.23E+0	9.36E+0	5.91E+2	4.43E+0	4.48E+1	2.46E-1	-2.97E+2	3.43E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.76E+2	5.23E+0	9.36E+0	5.91E+2	4.43E+0	4.48E+1	2.46E-1	-2.97E+2	3.43E+2
PET	MJ	6.08E+2	5.29E+0	3.54E+1	6.49E+2	4.49E+0	4.78E+1	2.55E-1	-3.11E+2	3.90E+2
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	3.71E-1	6.00E-4	1.38E-1	5.09E-1	4.72E-4	4.57E-2	2.84E-4	-1.69E-1	3.86E-1
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.79E-3	1.25E-5	1.21E-5	1.82E-3	1.07E-5	6.79E-5	2.82E-7	-2.28E-4	1.67E-3
NHWD	kg	1.98E+0	3.12E-1	1.74E-2	2.31E+0	2.59E-1	1.55E+0	1.03E+0	-8.64E-1	4.29E+0
RWD	kg	9.45E-4	3.23E-5	2.17E-5	9.99E-4	2.84E-5	1.57E-4	1.51E-6	-4.61E-4	7.25E-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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