

Environmental Profile

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

Ecochain v3.5.80



Product: 3085256 - PVC Vent. Reducer BL 195x125 S/S Steel
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	0.06	0	0	0.07	0	0.02	0	-0.03	0.05
ADPE	kg Sb-eq	5.41E-4	1.86E-7	8.80E-7	5.42E-4	1.68E-7	1.56E-6	1.87E-9	-5.96E-6	5.37E-4
ADPF	kg Sb-eq	6.30E-3	5.37E-5	1.51E-4	6.51E-3	4.72E-5	5.32E-4	2.59E-6	-3.36E-3	3.73E-3
GWP	kg CO2-eq	5.52E-1	7.30E-3	2.87E-2	5.88E-1	6.42E-3	1.81E-1	1.77E-3	-2.93E-1	4.85E-1
ODP	kg CFC-11-eq	2.74E-7	1.29E-9	2.27E-9	2.78E-7	1.19E-9	2.21E-8	6.18E-11	-1.43E-7	1.58E-7
POCP	kg ethene-eq	3.36E-4	4.40E-6	1.25E-5	3.53E-4	3.85E-6	4.30E-5	4.59E-7	-1.56E-4	2.44E-4
AP	kg SO2-eq	2.27E-3	3.21E-5	1.23E-4	2.42E-3	2.76E-5	3.12E-4	1.40E-6	-1.04E-3	1.72E-3
EP	kg PO4 3--eq	2.98E-4	6.30E-6	1.59E-5	3.20E-4	5.52E-6	4.79E-5	5.50E-7	-1.52E-4	2.22E-4
HTP	kg 1,4-DB-eq	1.99E-1	3.07E-3	1.33E-2	2.16E-1	2.75E-3	8.11E-2	1.47E-4	-9.75E-2	2.02E-1
FAETP	kg 1,4-DB-eq	6.73E-3	8.97E-5	4.56E-4	7.28E-3	8.05E-5	1.25E-3	4.63E-5	-3.18E-3	5.47E-3
MAETP	kg 1,4-DB-eq	1.43E+1	3.23E-1	1.79E+0	1.64E+1	2.87E-1	4.38E+0	5.64E-2	-6.32E+0	1.48E+1
TETP	kg 1,4-DB-eq	1.50E-3	1.09E-5	9.92E-4	2.50E-3	9.73E-6	2.86E-4	4.92E-7	-1.06E-3	1.74E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.72E-1	7.36E-3	3.29E-2	6.12E-1	6.48E-3	2.02E-1	2.07E-3	-2.55E-1	5.68E-1
GWP-f	kg CO2 eq	5.65E-1	7.36E-3	2.53E-2	5.98E-1	6.47E-3	1.82E-1	2.07E-3	-2.99E-1	4.89E-1
GWP-b	kg CO2 eq	5.52E-3	3.40E-6	5.21E-3	1.07E-2	3.93E-6	2.02E-2	2.60E-6	4.47E-2	7.56E-2
GWP-luluc	kg CO2 eq	6.90E-4	2.70E-6	2.40E-3	3.09E-3	2.29E-6	8.19E-5	5.43E-8	-5.03E-4	2.67E-3
ODP	kg CFC11 eq	2.71E-7	1.62E-9	2.67E-9	2.75E-7	1.49E-9	2.28E-8	7.67E-11	-1.42E-7	1.58E-7
AP	mol H+ eq	2.76E-3	4.27E-5	1.54E-4	2.96E-3	3.69E-5	3.93E-4	1.87E-6	-1.26E-3	2.13E-3
EP-fw	kg P eq	2.70E-5	7.42E-8	4.42E-7	2.76E-5	5.33E-8	2.75E-6	2.45E-9	-1.42E-5	1.61E-5
EP-m	kg N eq	5.14E-4	1.50E-5	3.64E-5	5.65E-4	1.32E-5	9.74E-5	1.16E-6	-2.31E-4	4.46E-4
EP-T	mol N eq	5.34E-3	1.66E-4	4.01E-4	5.90E-3	1.45E-4	1.07E-3	7.44E-6	-2.50E-3	4.63E-3
POCP	kg NMVOC eq	1.73E-3	4.73E-5	1.14E-4	1.89E-3	4.16E-5	3.21E-4	2.56E-6	-8.12E-4	1.44E-3
ADP-mm	kg Sb eq	5.41E-4	1.86E-7	8.80E-7	5.42E-4	1.68E-7	1.56E-6	1.87E-9	-5.95E-6	5.37E-4
ADP-f	MJ	1.34E+1	1.11E-1	2.82E-1	1.38E+1	9.94E-2	1.05E+0	5.60E-3	-7.11E+0	7.83E+0
WDP	m3 depriv.	8.33E-1	3.97E-4	2.18E-1	1.05E+0	3.05E-4	4.11E-2	3.73E-5	-4.65E-1	6.28E-1
PM	disease inc.	1.99E-8	6.61E-10	1.90E-9	2.24E-8	5.85E-10	4.89E-9	3.86E-11	-1.10E-8	1.69E-8
IR	kBq U-235 eq	2.93E-2	4.65E-4	4.49E-4	3.03E-2	4.34E-4	3.75E-3	2.57E-5	-1.57E-2	1.88E-2
ETP-fw	CTUe	1.85E+1	9.90E-2	6.56E-1	1.92E+1	8.07E-2	8.06E+0	8.86E-2	-7.35E+0	2.01E+1
HTP-c	CTUh	4.37E-10	3.21E-12	2.27E-11	4.63E-10	2.87E-12	1.19E-10	1.55E-13	-1.73E-10	4.11E-10
HTP-nc	CTUh	1.43E-8	1.08E-10	7.09E-10	1.51E-8	9.62E-11	2.82E-9	1.70E-11	-5.97E-9	1.21E-8
SQP	Pt	3.50E+0	9.63E-2	2.11E-2	3.62E+0	8.50E-2	6.42E-1	1.44E-2	-9.06E+0	-4.71E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.01E+0	1.39E-3	1.37E+0	2.38E+0	1.43E-3	7.53E-2	2.09E-4	-1.80E+0	6.57E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.01E+0	1.39E-3	1.37E+0	2.38E+0	1.43E-3	7.53E-2	2.09E-4	-1.80E+0	6.57E-1
PENRE	MJ	1.44E+1	1.18E-1	3.05E-1	1.48E+1	1.06E-1	1.12E+0	5.95E-3	-7.65E+0	8.38E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.44E+1	1.18E-1	3.05E-1	1.48E+1	1.06E-1	1.12E+0	5.95E-3	-7.65E+0	8.38E+0
PET	MJ	1.54E+1	1.19E-1	1.68E+0	1.72E+1	1.07E-1	1.20E+0	6.16E-3	-9.45E+0	9.03E+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	9.69E-3	1.35E-5	5.16E-3	1.49E-2	1.12E-5	1.13E-3	6.86E-6	-5.90E-3	1.01E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.73E-5	2.81E-7	3.00E-7	7.78E-5	2.54E-7	1.74E-6	6.83E-9	-6.09E-6	7.38E-5
NHWD	kg	5.65E-2	7.04E-3	4.63E-4	6.40E-2	6.16E-3	3.82E-2	2.46E-2	-2.48E-2	1.08E-1
RWD	kg	2.56E-5	7.29E-7	5.56E-7	2.69E-5	6.76E-7	4.05E-6	3.64E-8	-1.40E-5	1.76E-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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