

Environmental Profile

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

Ecochain v3.5.80



Product: 3085253 - PVC Endp.Valve 90° BL 125x80 H=100 S/S
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

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!

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



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	0.08	0	0	0.09	0	0.03	0	-0.04	0.07
ADPE	kg Sb-eq	7.32E-4	2.46E-7	1.23E-6	7.33E-4	2.27E-7	2.08E-6	2.54E-9	-7.97E-6	7.27E-4
ADPF	kg Sb-eq	8.45E-3	7.07E-5	2.11E-4	8.73E-3	6.38E-5	7.15E-4	3.51E-6	-4.50E-3	5.01E-3
GWP	kg CO2-eq	7.36E-1	9.62E-3	4.00E-2	7.85E-1	8.70E-3	2.43E-1	2.40E-3	-3.89E-1	6.51E-1
ODP	kg CFC-11-eq	3.70E-7	1.71E-9	3.16E-9	3.75E-7	1.61E-9	2.98E-8	8.36E-11	-1.93E-7	2.13E-7
POCP	kg ethene-eq	4.49E-4	5.80E-6	1.74E-5	4.73E-4	5.22E-6	5.72E-5	6.22E-7	-2.06E-4	3.30E-4
AP	kg SO2-eq	3.02E-3	4.23E-5	1.72E-4	3.24E-3	3.74E-5	4.18E-4	1.89E-6	-1.36E-3	2.34E-3
EP	kg PO4 3--eq	3.89E-4	8.31E-6	2.21E-5	4.20E-4	7.47E-6	6.38E-5	7.44E-7	-1.92E-4	3.00E-4
HTP	kg 1,4-DB-eq	2.66E-1	4.05E-3	1.86E-2	2.89E-1	3.72E-3	1.09E-1	1.99E-4	-1.28E-1	2.73E-1
FAETP	kg 1,4-DB-eq	8.62E-3	1.18E-4	6.35E-4	9.37E-3	1.09E-4	1.66E-3	6.27E-5	-3.92E-3	7.29E-3
MAETP	kg 1,4-DB-eq	1.90E+1	4.25E-1	2.50E+0	2.19E+1	3.89E-1	5.80E+0	7.63E-2	-8.30E+0	1.99E+1
TETP	kg 1,4-DB-eq	1.98E-3	1.43E-5	1.38E-3	3.38E-3	1.32E-5	3.85E-4	6.66E-7	-1.31E-3	2.47E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.61E-1	9.71E-3	4.58E-2	8.17E-1	8.77E-3	2.67E-1	2.80E-3	-3.51E-1	7.44E-1
GWP-f	kg CO2 eq	7.53E-1	9.70E-3	3.52E-2	7.98E-1	8.76E-3	2.45E-1	2.80E-3	-3.97E-1	6.58E-1
GWP-b	kg CO2 eq	7.27E-3	4.48E-6	7.26E-3	1.45E-2	5.32E-6	2.14E-2	3.51E-6	4.70E-2	8.29E-2
GWP-luluc	kg CO2 eq	8.59E-4	3.55E-6	3.34E-3	4.20E-3	3.10E-6	1.11E-4	7.34E-8	-5.87E-4	3.73E-3
ODP	kg CFC11 eq	3.65E-7	2.14E-9	3.72E-9	3.71E-7	2.02E-9	3.07E-8	1.04E-10	-1.91E-7	2.13E-7
AP	mol H+ eq	3.68E-3	5.63E-5	2.15E-4	3.95E-3	4.99E-5	5.25E-4	2.53E-6	-1.65E-3	2.88E-3
EP-fw	kg P eq	3.58E-5	9.78E-8	6.17E-7	3.65E-5	7.21E-8	3.70E-6	3.32E-9	-1.81E-5	2.22E-5
EP-m	kg N eq	6.73E-4	1.98E-5	5.07E-5	7.43E-4	1.79E-5	1.29E-4	1.56E-6	-2.98E-4	5.94E-4
EP-T	mol N eq	7.01E-3	2.19E-4	5.59E-4	7.79E-3	1.97E-4	1.43E-3	1.01E-5	-3.22E-3	6.20E-3
POCP	kg NMVOC eq	2.30E-3	6.24E-5	1.59E-4	2.52E-3	5.63E-5	4.27E-4	3.47E-6	-1.06E-3	1.95E-3
ADP-mm	kg Sb eq	7.32E-4	2.46E-7	1.23E-6	7.33E-4	2.27E-7	2.08E-6	2.54E-9	-7.97E-6	7.27E-4
ADP-f	MJ	1.80E+1	1.46E-1	3.94E-1	1.85E+1	1.35E-1	1.41E+0	7.59E-3	-9.50E+0	1.05E+1
WDP	m3 depriv.	1.12E+0	5.23E-4	3.05E-1	1.43E+0	4.13E-4	5.55E-2	5.05E-5	-6.11E-1	8.74E-1
PM	disease inc.	2.59E-8	8.71E-10	2.65E-9	2.94E-8	7.91E-10	6.53E-9	5.22E-11	-1.36E-8	2.31E-8
IR	kBq U-235 eq	3.91E-2	6.13E-4	6.26E-4	4.04E-2	5.88E-4	5.02E-3	3.48E-5	-2.04E-2	2.56E-2
ETP-fw	CTUe	2.33E+1	1.30E-1	9.14E-1	2.44E+1	1.09E-1	1.09E+1	1.20E-1	-8.92E+0	2.66E+1
HTP-c	CTUh	5.85E-10	4.23E-12	3.16E-11	6.21E-10	3.89E-12	1.59E-10	2.10E-13	-2.26E-10	5.58E-10
HTP-nc	CTUh	1.92E-8	1.43E-10	9.88E-10	2.03E-8	1.30E-10	3.79E-9	2.30E-11	-7.81E-9	1.64E-8
SQP	Pt	4.20E+0	1.27E-1	2.94E-2	4.35E+0	1.15E-1	8.63E-1	1.94E-2	-9.84E+0	-4.49E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.26E+0	1.83E-3	1.91E+0	3.17E+0	1.93E-3	1.02E-1	2.83E-4	-2.00E+0	1.27E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.26E+0	1.83E-3	1.91E+0	3.17E+0	1.93E-3	1.02E-1	2.83E-4	-2.00E+0	1.27E+0
PENRE	MJ	1.93E+1	1.55E-1	4.25E-1	1.98E+1	1.43E-1	1.50E+0	8.05E-3	-1.02E+1	1.13E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.93E+1	1.55E-1	4.25E-1	1.98E+1	1.43E-1	1.50E+0	8.05E-3	-1.02E+1	1.13E+1
PET	MJ	2.05E+1	1.57E-1	2.34E+0	2.30E+1	1.45E-1	1.61E+0	8.33E-3	-1.22E+1	1.25E+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	1.29E-2	1.78E-5	7.20E-3	2.02E-2	1.52E-5	1.52E-3	9.29E-6	-7.49E-3	1.42E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.04E-4	3.71E-7	4.18E-7	1.05E-4	3.44E-7	2.33E-6	9.25E-9	-8.08E-6	9.97E-5
NHWD	kg	7.43E-2	9.28E-3	6.45E-4	8.42E-2	8.34E-3	5.11E-2	3.33E-2	-3.26E-2	1.44E-1
RWD	kg	3.41E-5	9.61E-7	7.74E-7	3.58E-5	9.15E-7	5.40E-6	4.93E-8	-1.82E-5	2.40E-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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