

Environmental Profile

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

Ecochain v3.5.80



Product: 3085252 - PVC Endp.Valve 90° BL 125x80 H=70 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	0.07	0	0	0.07	0	0.02	0	-0.03	0.06
ADPE	kg Sb-eq	6.26E-4	2.09E-7	1.04E-6	6.27E-4	1.94E-7	1.78E-6	2.17E-9	-6.80E-6	6.23E-4
ADPF	kg Sb-eq	7.21E-3	6.01E-5	1.79E-4	7.45E-3	5.46E-5	6.10E-4	3.00E-6	-3.84E-3	4.28E-3
GWP	kg CO2-eq	6.27E-1	8.17E-3	3.41E-2	6.69E-1	7.44E-3	2.08E-1	2.05E-3	-3.31E-1	5.55E-1
ODP	kg CFC-11-eq	3.16E-7	1.45E-9	2.69E-9	3.20E-7	1.38E-9	2.55E-8	7.16E-11	-1.65E-7	1.82E-7
POCP	kg ethene-eq	3.83E-4	4.93E-6	1.48E-5	4.03E-4	4.47E-6	4.87E-5	5.32E-7	-1.75E-4	2.82E-4
AP	kg SO2-eq	2.57E-3	3.59E-5	1.46E-4	2.76E-3	3.20E-5	3.57E-4	1.62E-6	-1.15E-3	2.00E-3
EP	kg PO4 3--eq	3.30E-4	7.06E-6	1.88E-5	3.56E-4	6.40E-6	5.44E-5	6.37E-7	-1.61E-4	2.56E-4
HTP	kg 1,4-DB-eq	2.27E-1	3.44E-3	1.58E-2	2.46E-1	3.18E-3	9.29E-2	1.70E-4	-1.09E-1	2.34E-1
FAETP	kg 1,4-DB-eq	7.26E-3	1.00E-4	5.40E-4	7.90E-3	9.32E-5	1.42E-3	5.37E-5	-3.26E-3	6.20E-3
MAETP	kg 1,4-DB-eq	1.62E+1	3.61E-1	2.13E+0	1.87E+1	3.33E-1	4.93E+0	6.53E-2	-7.04E+0	1.70E+1
TETP	kg 1,4-DB-eq	1.68E-3	1.22E-5	1.18E-3	2.87E-3	1.13E-5	3.30E-4	5.70E-7	-1.09E-3	2.12E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	6.49E-1	8.24E-3	3.90E-2	6.96E-1	7.51E-3	2.26E-1	2.40E-3	-3.02E-1	6.30E-1
GWP-f	kg CO2 eq	6.42E-1	8.24E-3	3.00E-2	6.80E-1	7.50E-3	2.09E-1	2.40E-3	-3.38E-1	5.61E-1
GWP-b	kg CO2 eq	6.18E-3	3.80E-6	6.18E-3	1.24E-2	4.56E-6	1.69E-2	3.01E-6	3.69E-2	6.61E-2
GWP-luluc	kg CO2 eq	7.16E-4	3.02E-6	2.84E-3	3.56E-3	2.66E-6	9.45E-5	6.29E-8	-4.79E-4	3.18E-3
ODP	kg CFC11 eq	3.12E-7	1.82E-9	3.16E-9	3.17E-7	1.73E-9	2.62E-8	8.88E-11	-1.63E-7	1.82E-7
AP	mol H+ eq	3.13E-3	4.78E-5	1.83E-4	3.36E-3	4.27E-5	4.48E-4	2.16E-6	-1.39E-3	2.46E-3
EP-fw	kg P eq	3.04E-5	8.31E-8	5.25E-7	3.10E-5	6.17E-8	3.17E-6	2.84E-9	-1.52E-5	1.91E-5
EP-m	kg N eq	5.70E-4	1.68E-5	4.31E-5	6.30E-4	1.53E-5	1.10E-4	1.34E-6	-2.51E-4	5.05E-4
EP-T	mol N eq	5.95E-3	1.86E-4	4.76E-4	6.61E-3	1.68E-4	1.21E-3	8.62E-6	-2.71E-3	5.29E-3
POCP	kg NMVOC eq	1.95E-3	5.30E-5	1.35E-4	2.14E-3	4.82E-5	3.63E-4	2.97E-6	-8.95E-4	1.66E-3
ADP-mm	kg Sb eq	6.26E-4	2.09E-7	1.04E-6	6.27E-4	1.94E-7	1.78E-6	2.17E-9	-6.80E-6	6.23E-4
ADP-f	MJ	1.53E+1	1.24E-1	3.35E-1	1.58E+1	1.15E-1	1.21E+0	6.49E-3	-8.10E+0	9.01E+0
WDP	m3 depriv.	9.60E-1	4.44E-4	2.59E-1	1.22E+0	3.53E-4	4.75E-2	4.32E-5	-5.18E-1	7.50E-1
PM	disease inc.	2.19E-8	7.40E-10	2.25E-9	2.49E-8	6.77E-10	5.56E-9	4.47E-11	-1.13E-8	1.98E-8
IR	kBq U-235 eq	3.34E-2	5.21E-4	5.32E-4	3.44E-2	5.03E-4	4.28E-3	2.98E-5	-1.73E-2	2.19E-2
ETP-fw	CTUe	1.96E+1	1.11E-1	7.78E-1	2.04E+1	9.35E-2	9.31E+0	1.03E-1	-7.39E+0	2.26E+1
HTP-c	CTUh	4.99E-10	3.59E-12	2.69E-11	5.29E-10	3.33E-12	1.35E-10	1.80E-13	-1.91E-10	4.77E-10
HTP-nc	CTUh	1.64E-8	1.21E-10	8.41E-10	1.73E-8	1.11E-10	3.24E-9	1.97E-11	-6.62E-9	1.41E-8
SQP	Pt	3.46E+0	1.08E-1	2.50E-2	3.59E+0	9.85E-2	7.37E-1	1.66E-2	-7.83E+0	-3.39E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.05E+0	1.56E-3	1.63E+0	2.68E+0	1.65E-3	8.69E-2	2.42E-4	-1.61E+0	1.16E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.05E+0	1.56E-3	1.63E+0	2.68E+0	1.65E-3	8.69E-2	2.42E-4	-1.61E+0	1.16E+0
PENRE	MJ	1.64E+1	1.32E-1	3.62E-1	1.69E+1	1.22E-1	1.28E+0	6.89E-3	-8.72E+0	9.63E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.64E+1	1.32E-1	3.62E-1	1.69E+1	1.22E-1	1.28E+0	6.89E-3	-8.72E+0	9.63E+0
PET	MJ	1.75E+1	1.33E-1	1.99E+0	1.96E+1	1.24E-1	1.37E+0	7.13E-3	-1.03E+1	1.08E+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	1.10E-2	1.51E-5	6.13E-3	1.72E-2	1.30E-5	1.30E-3	7.95E-6	-6.28E-3	1.22E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.92E-5	3.15E-7	3.56E-7	8.99E-5	2.94E-7	1.98E-6	7.92E-9	-6.87E-6	8.53E-5
NHWD	kg	6.30E-2	7.88E-3	5.49E-4	7.14E-2	7.14E-3	4.36E-2	2.85E-2	-2.76E-2	1.23E-1
RWD	kg	2.90E-5	8.16E-7	6.59E-7	3.05E-5	7.83E-7	4.60E-6	4.22E-8	-1.54E-5	2.05E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777