

Environmental Profile

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

Ecochain v3.5.80



Product: 3085247 - PVC Endp.Valve 90° BL 195x125 H=50 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	0.09	0	0.01	0.1	0	0.03	0	-0.05	0.08
ADPE	kg Sb-eq	8.04E-4	2.78E-7	1.40E-6	8.06E-4	2.49E-7	2.32E-6	2.79E-9	-8.87E-6	8.00E-4
ADPF	kg Sb-eq	9.38E-3	8.00E-5	2.40E-4	9.70E-3	7.02E-5	7.92E-4	3.86E-6	-5.00E-3	5.57E-3
GWP	kg CO2-eq	8.23E-1	1.09E-2	4.56E-2	8.79E-1	9.56E-3	2.69E-1	2.64E-3	-4.36E-1	7.24E-1
ODP	kg CFC-11-eq	4.08E-7	1.93E-9	3.60E-9	4.14E-7	1.77E-9	3.29E-8	9.19E-11	-2.13E-7	2.35E-7
POCP	kg ethene-eq	5.00E-4	6.56E-6	1.98E-5	5.27E-4	5.73E-6	6.40E-5	6.83E-7	-2.33E-4	3.64E-4
AP	kg SO2-eq	3.37E-3	4.78E-5	1.96E-4	3.62E-3	4.11E-5	4.65E-4	2.08E-6	-1.55E-3	2.58E-3
EP	kg PO4 3--eq	4.44E-4	9.39E-6	2.52E-5	4.79E-4	8.21E-6	7.13E-5	8.18E-7	-2.28E-4	3.31E-4
HTP	kg 1,4-DB-eq	2.97E-1	4.58E-3	2.12E-2	3.23E-1	4.09E-3	1.21E-1	2.18E-4	-1.45E-1	3.03E-1
FAETP	kg 1,4-DB-eq	1.01E-2	1.34E-4	7.23E-4	1.09E-2	1.20E-4	1.85E-3	6.89E-5	-4.76E-3	8.20E-3
MAETP	kg 1,4-DB-eq	2.13E+1	4.81E-1	2.85E+0	2.46E+1	4.28E-1	6.52E+0	8.39E-2	-9.41E+0	2.22E+1
TETP	kg 1,4-DB-eq	2.24E-3	1.62E-5	1.57E-3	3.83E-3	1.45E-5	4.25E-4	7.32E-7	-1.59E-3	2.68E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.51E-1	1.10E-2	5.22E-2	9.14E-1	9.64E-3	3.01E-1	3.08E-3	-3.78E-1	8.50E-1
GWP-f	kg CO2 eq	8.42E-1	1.10E-2	4.01E-2	8.93E-1	9.63E-3	2.70E-1	3.08E-3	-4.45E-1	7.31E-1
GWP-b	kg CO2 eq	8.23E-3	5.06E-6	8.27E-3	1.65E-2	5.85E-6	3.04E-2	3.86E-6	6.73E-2	1.14E-1
GWP-luluc	kg CO2 eq	1.03E-3	4.02E-6	3.81E-3	4.84E-3	3.41E-6	1.22E-4	8.07E-8	-7.55E-4	4.21E-3
ODP	kg CFC11 eq	4.03E-7	2.42E-9	4.24E-9	4.10E-7	2.22E-9	3.40E-8	1.14E-10	-2.11E-7	2.35E-7
AP	mol H+ eq	4.12E-3	6.36E-5	2.44E-4	4.43E-3	5.49E-5	5.85E-4	2.78E-6	-1.88E-3	3.18E-3
EP-fw	kg P eq	4.03E-5	1.11E-7	7.02E-7	4.11E-5	7.93E-8	4.09E-6	3.65E-9	-2.12E-5	2.40E-5
EP-m	kg N eq	7.66E-4	2.24E-5	5.77E-5	8.46E-4	1.96E-5	1.45E-4	1.72E-6	-3.44E-4	6.68E-4
EP-T	mol N eq	7.96E-3	2.47E-4	6.37E-4	8.84E-3	2.16E-4	1.60E-3	1.11E-5	-3.73E-3	6.93E-3
POCP	kg NMVOC eq	2.58E-3	7.05E-5	1.81E-4	2.83E-3	6.19E-5	4.78E-4	3.82E-6	-1.21E-3	2.16E-3
ADP-mm	kg Sb eq	8.04E-4	2.78E-7	1.40E-6	8.06E-4	2.49E-7	2.32E-6	2.79E-9	-8.86E-6	8.00E-4
ADP-f	MJ	1.99E+1	1.65E-1	4.48E-1	2.05E+1	1.48E-1	1.57E+0	8.34E-3	-1.06E+1	1.17E+1
WDP	m3 depriv.	1.24E+0	5.92E-4	3.47E-1	1.59E+0	4.54E-4	6.11E-2	5.55E-5	-6.94E-1	9.55E-1
PM	disease inc.	2.96E-8	9.85E-10	3.02E-9	3.36E-8	8.70E-10	7.29E-9	5.74E-11	-1.65E-8	2.54E-8
IR	kBq U-235 eq	4.37E-2	6.93E-4	7.12E-4	4.51E-2	6.46E-4	5.58E-3	3.83E-5	-2.34E-2	2.79E-2
ETP-fw	CTUe	2.76E+1	1.47E-1	1.04E+0	2.88E+1	1.20E-1	1.20E+1	1.32E-1	-1.10E+1	3.00E+1
HTP-c	CTUh	6.51E-10	4.78E-12	3.60E-11	6.92E-10	4.27E-12	1.77E-10	2.31E-13	-2.58E-10	6.15E-10
HTP-nc	CTUh	2.13E-8	1.61E-10	1.13E-9	2.26E-8	1.43E-10	4.19E-9	2.53E-11	-8.90E-9	1.81E-8
SQP	Pt	5.25E+0	1.43E-1	3.35E-2	5.42E+0	1.27E-1	9.56E-1	2.14E-2	-1.36E+1	-7.11E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.51E+0	2.07E-3	2.18E+0	3.69E+0	2.12E-3	1.12E-1	3.11E-4	-2.71E+0	1.09E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.51E+0	2.07E-3	2.18E+0	3.69E+0	2.12E-3	1.12E-1	3.11E-4	-2.71E+0	1.09E+0
PENRE	MJ	2.14E+1	1.76E-1	4.84E-1	2.21E+1	1.57E-1	1.67E+0	8.85E-3	-1.14E+1	1.25E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.14E+1	1.76E-1	4.84E-1	2.21E+1	1.57E-1	1.67E+0	8.85E-3	-1.14E+1	1.25E+1
PET	MJ	2.29E+1	1.78E-1	2.66E+0	2.57E+1	1.59E-1	1.78E+0	9.16E-3	-1.41E+1	1.36E+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	1.44E-2	2.01E-5	8.20E-3	2.26E-2	1.67E-5	1.68E-3	1.02E-5	-8.82E-3	1.55E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.15E-4	4.19E-7	4.76E-7	1.16E-4	3.78E-7	2.60E-6	1.02E-8	-9.08E-6	1.10E-4
NHWD	kg	8.44E-2	1.05E-2	7.35E-4	9.57E-2	9.17E-3	5.68E-2	3.66E-2	-3.70E-2	1.61E-1
RWD	kg	3.82E-5	1.09E-6	8.82E-7	4.02E-5	1.01E-6	6.03E-6	5.42E-8	-2.09E-5	2.63E-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