

Environmental Profile

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

Ecochain v3.5.80



Product: 3085248 - PVC Endp.Valve 90° BL 195x125 H=70 S/S
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	0.1	0	0.01	0.11	0	0.03	0	-0.05	0.09
ADPE	kg Sb-eq	8.75E-4	2.99E-7	1.50E-6	8.76E-4	2.71E-7	2.51E-6	3.03E-9	-9.60E-6	8.70E-4
ADPF	kg Sb-eq	1.02E-2	8.61E-5	2.58E-4	1.05E-2	7.63E-5	8.59E-4	4.20E-6	-5.42E-3	6.03E-3
GWP	kg CO2-eq	8.89E-1	1.17E-2	4.90E-2	9.50E-1	1.04E-2	2.92E-1	2.87E-3	-4.71E-1	7.84E-1
ODP	kg CFC-11-eq	4.43E-7	2.08E-9	3.88E-9	4.49E-7	1.93E-9	3.57E-8	9.99E-11	-2.31E-7	2.56E-7
POCP	kg ethene-eq	5.41E-4	7.06E-6	2.13E-5	5.70E-4	6.24E-6	6.92E-5	7.43E-7	-2.50E-4	3.96E-4
AP	kg SO2-eq	3.65E-3	5.15E-5	2.11E-4	3.91E-3	4.47E-5	5.04E-4	2.26E-6	-1.66E-3	2.80E-3
EP	kg PO4 3--eq	4.77E-4	1.01E-5	2.71E-5	5.14E-4	8.93E-6	7.71E-5	8.89E-7	-2.41E-4	3.60E-4
HTP	kg 1,4-DB-eq	3.21E-1	4.93E-3	2.28E-2	3.49E-1	4.45E-3	1.31E-1	2.38E-4	-1.56E-1	3.28E-1
FAETP	kg 1,4-DB-eq	1.07E-2	1.44E-4	7.78E-4	1.16E-2	1.30E-4	2.01E-3	7.50E-5	-5.00E-3	8.84E-3
MAETP	kg 1,4-DB-eq	2.30E+1	5.18E-1	3.07E+0	2.66E+1	4.65E-1	7.03E+0	9.12E-2	-1.01E+1	2.41E+1
TETP	kg 1,4-DB-eq	2.41E-3	1.74E-5	1.69E-3	4.12E-3	1.58E-5	4.62E-4	7.96E-7	-1.67E-3	2.93E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.20E-1	1.18E-2	5.61E-2	9.88E-1	1.05E-2	3.24E-1	3.35E-3	-4.14E-1	9.12E-1
GWP-f	kg CO2 eq	9.10E-1	1.18E-2	4.31E-2	9.65E-1	1.05E-2	2.94E-1	3.35E-3	-4.81E-1	7.92E-1
GWP-b	kg CO2 eq	8.86E-3	5.45E-6	8.90E-3	1.78E-2	6.36E-6	3.04E-2	4.20E-6	6.71E-2	1.15E-1
GWP-luluc	kg CO2 eq	1.09E-3	4.33E-6	4.09E-3	5.19E-3	3.71E-6	1.32E-4	8.78E-8	-7.78E-4	4.54E-3
ODP	kg CFC11 eq	4.38E-7	2.61E-9	4.56E-9	4.45E-7	2.41E-9	3.68E-8	1.24E-10	-2.29E-7	2.55E-7
AP	mol H+ eq	4.45E-3	6.85E-5	2.63E-4	4.78E-3	5.97E-5	6.33E-4	3.02E-6	-2.02E-3	3.46E-3
EP-fw	kg P eq	4.34E-5	1.19E-7	7.55E-7	4.43E-5	8.62E-8	4.44E-6	3.97E-9	-2.26E-5	2.63E-5
EP-m	kg N eq	8.22E-4	2.41E-5	6.21E-5	9.09E-4	2.14E-5	1.57E-4	1.87E-6	-3.68E-4	7.21E-4
EP-T	mol N eq	8.56E-3	2.66E-4	6.85E-4	9.51E-3	2.35E-4	1.73E-3	1.20E-5	-3.98E-3	7.50E-3
POCP	kg NMVOC eq	2.78E-3	7.59E-5	1.95E-4	3.05E-3	6.73E-5	5.16E-4	4.15E-6	-1.30E-3	2.34E-3
ADP-mm	kg Sb eq	8.75E-4	2.99E-7	1.50E-6	8.76E-4	2.71E-7	2.51E-6	3.03E-9	-9.60E-6	8.70E-4
ADP-f	MJ	2.16E+1	1.78E-1	4.82E-1	2.23E+1	1.61E-1	1.70E+0	9.07E-3	-1.15E+1	1.27E+1
WDP	m3 depriv.	1.35E+0	6.37E-4	3.73E-1	1.72E+0	4.94E-4	6.64E-2	6.04E-5	-7.45E-1	1.04E+0
PM	disease inc.	3.18E-8	1.06E-9	3.25E-9	3.61E-8	9.46E-10	7.88E-9	6.24E-11	-1.73E-8	2.76E-8
IR	kBq U-235 eq	4.73E-2	7.46E-4	7.66E-4	4.88E-2	7.03E-4	6.04E-3	4.16E-5	-2.51E-2	3.05E-2
ETP-fw	CTUe	2.92E+1	1.59E-1	1.12E+0	3.05E+1	1.31E-1	1.30E+1	1.43E-1	-1.15E+1	3.23E+1
HTP-c	CTUh	7.05E-10	5.15E-12	3.88E-11	7.49E-10	4.65E-12	1.91E-10	2.52E-13	-2.76E-10	6.68E-10
HTP-nc	CTUh	2.31E-8	1.74E-10	1.21E-9	2.45E-8	1.56E-10	4.55E-9	2.75E-11	-9.55E-9	1.96E-8
SQP	Pt	5.46E+0	1.54E-1	3.60E-2	5.65E+0	1.38E-1	1.04E+0	2.32E-2	-1.37E+1	-6.89E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.59E+0	2.23E-3	2.34E+0	3.94E+0	2.31E-3	1.22E-1	3.38E-4	-2.75E+0	1.31E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.59E+0	2.23E-3	2.34E+0	3.94E+0	2.31E-3	1.22E-1	3.38E-4	-2.75E+0	1.31E+0
PENRE	MJ	2.32E+1	1.89E-1	5.21E-1	2.39E+1	1.71E-1	1.81E+0	9.62E-3	-1.23E+1	1.36E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.32E+1	1.89E-1	5.21E-1	2.39E+1	1.71E-1	1.81E+0	9.62E-3	-1.23E+1	1.36E+1
PET	MJ	2.48E+1	1.91E-1	2.87E+0	2.78E+1	1.73E-1	1.93E+0	9.96E-3	-1.51E+1	1.49E+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	1.56E-2	2.17E-5	8.82E-3	2.45E-2	1.82E-5	1.82E-3	1.11E-5	-9.36E-3	1.70E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.25E-4	4.51E-7	5.12E-7	1.26E-4	4.11E-7	2.81E-6	1.11E-8	-9.79E-6	1.19E-4
NHWD	kg	9.07E-2	1.13E-2	7.90E-4	1.03E-1	9.97E-3	6.15E-2	3.98E-2	-3.98E-2	1.74E-1
RWD	kg	4.12E-5	1.17E-6	9.49E-7	4.34E-5	1.09E-6	6.52E-6	5.89E-8	-2.24E-5	2.86E-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