

Environmental Profile

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

Ecochain v3.5.80



Product: 3085240 - PVC Vent. Solv.Cement Coupler BL 235 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	0.06	0	0	0.06	0	0.02	0	-0.03	0.05
ADPE	kg Sb-eq	5.23E-4	1.76E-7	8.84E-7	5.24E-4	1.62E-7	1.49E-6	1.81E-9	-5.70E-6	5.20E-4
ADPF	kg Sb-eq	6.04E-3	5.05E-5	1.52E-4	6.24E-3	4.56E-5	5.11E-4	2.51E-6	-3.21E-3	3.58E-3
GWP	kg CO2-eq	5.26E-1	6.87E-3	2.88E-2	5.62E-1	6.21E-3	1.74E-1	1.72E-3	-2.78E-1	4.66E-1
ODP	kg CFC-11-eq	2.64E-7	1.22E-9	2.28E-9	2.68E-7	1.15E-9	2.13E-8	5.98E-11	-1.38E-7	1.52E-7
POCP	kg ethene-eq	3.21E-4	4.15E-6	1.25E-5	3.38E-4	3.73E-6	4.09E-5	4.44E-7	-1.47E-4	2.36E-4
AP	kg SO2-eq	2.16E-3	3.02E-5	1.24E-4	2.31E-3	2.67E-5	2.99E-4	1.35E-6	-9.70E-4	1.67E-3
EP	kg PO4 3--eq	2.78E-4	5.94E-6	1.59E-5	3.00E-4	5.34E-6	4.56E-5	5.32E-7	-1.37E-4	2.14E-4
HTP	kg 1,4-DB-eq	1.90E-1	2.89E-3	1.34E-2	2.06E-1	2.66E-3	7.78E-2	1.42E-4	-9.16E-2	1.95E-1
FAETP	kg 1,4-DB-eq	6.16E-3	8.45E-5	4.57E-4	6.70E-3	7.79E-5	1.19E-3	4.48E-5	-2.80E-3	5.21E-3
MAETP	kg 1,4-DB-eq	1.36E+1	3.04E-1	1.80E+0	1.57E+1	2.78E-1	4.14E+0	5.46E-2	-5.93E+0	1.42E+1
TETP	kg 1,4-DB-eq	1.42E-3	1.02E-5	9.95E-4	2.42E-3	9.42E-6	2.76E-4	4.76E-7	-9.36E-4	1.77E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.44E-1	6.94E-3	3.30E-2	5.84E-1	6.27E-3	1.90E-1	2.00E-3	-2.51E-1	5.32E-1
GWP-f	kg CO2 eq	5.39E-1	6.93E-3	2.53E-2	5.71E-1	6.26E-3	1.75E-1	2.00E-3	-2.84E-1	4.70E-1
GWP-b	kg CO2 eq	5.20E-3	3.20E-6	5.23E-3	1.04E-2	3.80E-6	1.53E-2	2.51E-6	3.35E-2	5.92E-2
GWP-luluc	kg CO2 eq	6.13E-4	2.54E-6	2.41E-3	3.02E-3	2.22E-6	7.90E-5	5.25E-8	-4.19E-4	2.68E-3
ODP	kg CFC11 eq	2.61E-7	1.53E-9	2.68E-9	2.65E-7	1.44E-9	2.19E-8	7.42E-11	-1.37E-7	1.52E-7
AP	mol H+ eq	2.63E-3	4.02E-5	1.54E-4	2.82E-3	3.57E-5	3.75E-4	1.81E-6	-1.18E-3	2.06E-3
EP-fw	kg P eq	2.56E-5	6.99E-8	4.44E-7	2.61E-5	5.16E-8	2.65E-6	2.37E-9	-1.29E-5	1.59E-5
EP-m	kg N eq	4.81E-4	1.42E-5	3.65E-5	5.31E-4	1.28E-5	9.25E-5	1.12E-6	-2.13E-4	4.25E-4
EP-T	mol N eq	5.01E-3	1.56E-4	4.02E-4	5.57E-3	1.41E-4	1.02E-3	7.20E-6	-2.30E-3	4.44E-3
POCP	kg NMVOC eq	1.64E-3	4.46E-5	1.15E-4	1.80E-3	4.02E-5	3.05E-4	2.48E-6	-7.56E-4	1.39E-3
ADP-mm	kg Sb eq	5.23E-4	1.76E-7	8.84E-7	5.24E-4	1.62E-7	1.49E-6	1.81E-9	-5.70E-6	5.20E-4
ADP-f	MJ	1.28E+1	1.05E-1	2.83E-1	1.32E+1	9.62E-2	1.01E+0	5.42E-3	-6.79E+0	7.54E+0
WDP	m3 depriv.	8.03E-1	3.74E-4	2.19E-1	1.02E+0	2.95E-4	3.97E-2	3.61E-5	-4.36E-1	6.26E-1
PM	disease inc.	1.85E-8	6.23E-10	1.91E-9	2.10E-8	5.66E-10	4.66E-9	3.73E-11	-9.73E-9	1.66E-8
IR	kBq U-235 eq	2.80E-2	4.38E-4	4.50E-4	2.89E-2	4.20E-4	3.59E-3	2.49E-5	-1.46E-2	1.83E-2
ETP-fw	CTUe	1.67E+1	9.32E-2	6.58E-1	1.74E+1	7.81E-2	7.78E+0	8.57E-2	-6.37E+0	1.90E+1
HTP-c	CTUh	4.18E-10	3.02E-12	2.28E-11	4.44E-10	2.78E-12	1.13E-10	1.50E-13	-1.62E-10	3.99E-10
HTP-nc	CTUh	1.37E-8	1.02E-10	7.11E-10	1.45E-8	9.31E-11	2.71E-9	1.65E-11	-5.58E-9	1.18E-8
SQP	Pt	3.00E+0	9.07E-2	2.12E-2	3.11E+0	8.23E-2	6.17E-1	1.39E-2	-7.03E+0	-3.21E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.98E-1	1.31E-3	1.38E+0	2.28E+0	1.38E-3	7.26E-2	2.02E-4	-1.43E+0	9.20E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.98E-1	1.31E-3	1.38E+0	2.28E+0	1.38E-3	7.26E-2	2.02E-4	-1.43E+0	9.20E-1
PENRE	MJ	1.38E+1	1.11E-1	3.06E-1	1.42E+1	1.02E-1	1.08E+0	5.75E-3	-7.31E+0	8.06E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.38E+1	1.11E-1	3.06E-1	1.42E+1	1.02E-1	1.08E+0	5.75E-3	-7.31E+0	8.06E+0
PET	MJ	1.47E+1	1.12E-1	1.68E+0	1.65E+1	1.03E-1	1.15E+0	5.96E-3	-8.74E+0	8.98E+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	9.26E-3	1.27E-5	5.18E-3	1.45E-2	1.09E-5	1.09E-3	6.64E-6	-5.35E-3	1.02E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.46E-5	2.65E-7	3.01E-7	7.52E-5	2.46E-7	1.66E-6	6.61E-9	-5.77E-6	7.13E-5
NHWD	kg	5.31E-2	6.63E-3	4.64E-4	6.02E-2	5.96E-3	3.65E-2	2.38E-2	-2.33E-2	1.03E-1
RWD	kg	2.44E-5	6.87E-7	5.58E-7	2.56E-5	6.54E-7	3.86E-6	3.53E-8	-1.30E-5	1.71E-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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