

Environmental Profile

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

Ecochain v3.5.80



Product: 3004689 - PVC Electro Coupler VSV GY 5/8"
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

LCA standard: EN15804+A2 (2019)
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 - PL -Buk - Extra products (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

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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	5.14E-3	2.22E-4	1.45E-4	5.51E-3	2.33E-4	5.07E-2	7.56E-5	-2.08E-2	3.58E-2
GWP-f	kg CO2 eq	3.85E-2	2.22E-4	1.46E-4	3.88E-2	2.33E-4	1.71E-2	7.56E-5	-2.14E-2	3.48E-2
GWP-b	kg CO2 eq	-3.34E-2	1.35E-7	-1.54E-6	-3.34E-2	1.41E-7	3.36E-2	9.26E-8	6.79E-4	9.54E-4
GWP-luluc	kg CO2 eq	4.65E-5	7.84E-8	1.49E-7	4.67E-5	8.24E-8	3.03E-6	2.07E-9	-2.76E-5	2.23E-5
ODP	kg CFC11 eq	1.09E-8	5.11E-11	8.26E-12	1.09E-8	5.37E-11	8.48E-10	2.77E-12	-6.26E-9	5.58E-9
AP	mol H+ eq	1.85E-4	1.26E-6	1.47E-6	1.88E-4	1.33E-6	1.67E-5	6.78E-8	-7.70E-5	1.29E-4
EP-fw	kg P eq	1.51E-6	1.82E-9	8.24E-9	1.53E-6	1.92E-9	1.01E-7	9.18E-11	-6.64E-7	9.64E-7
EP-m	kg N eq	3.55E-5	4.52E-7	1.55E-7	3.61E-5	4.75E-7	4.57E-6	4.08E-8	-1.72E-5	2.41E-5
EP-T	mol N eq	3.94E-4	4.98E-6	1.85E-6	4.01E-4	5.23E-6	5.06E-5	2.69E-7	-1.93E-4	2.64E-4
POCP	kg NMVOC eq	1.47E-4	1.42E-6	6.28E-7	1.49E-4	1.50E-6	1.48E-5	9.30E-8	-6.83E-5	9.73E-5
ADP-mm	kg Sb eq	9.46E-7	5.73E-9	1.97E-8	9.71E-7	6.03E-9	6.05E-8	6.90E-11	-2.89E-7	7.49E-7
ADP-f	MJ	8.96E-1	3.40E-3	1.36E-3	9.01E-1	3.58E-3	4.15E-2	2.03E-4	-4.39E-1	5.07E-1
WDP	m3 depriv.	4.03E-2	1.04E-5	5.22E-5	4.03E-2	1.10E-5	1.48E-3	1.74E-6	-1.72E-2	2.46E-2
PM	disease inc.	1.88E-9	2.00E-11	9.08E-12	1.91E-9	2.10E-11	2.05E-10	1.39E-12	-9.42E-10	1.19E-9
IR	kBq U-235 eq	1.61E-3	1.49E-5	1.02E-6	1.63E-3	1.56E-5	1.50E-4	9.23E-7	-7.57E-4	1.04E-3
ETP-fw	CTUe	7.55E-1	2.76E-3	1.21E-2	7.70E-1	2.90E-3	2.84E-1	3.06E-3	-3.42E-1	7.18E-1
HTP-c	CTUh	3.67E-11	9.83E-14	6.17E-13	3.74E-11	1.03E-13	6.20E-12	5.89E-15	-1.82E-11	2.55E-11
HTP-nc	CTUh	7.06E-10	3.29E-12	1.57E-11	7.25E-10	3.46E-12	1.14E-10	5.92E-13	-2.56E-10	5.88E-10
SQP	Pt	2.93E+0	2.91E-3	2.24E-3	2.94E+0	3.06E-3	2.66E-2	5.17E-4	-2.50E+0	4.67E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.86E-1	4.88E-5	2.40E-2	5.10E-1	5.13E-5	2.80E-3	7.33E-6	-3.85E-1	1.27E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.86E-1	4.88E-5	2.40E-2	5.10E-1	5.13E-5	2.80E-3	7.33E-6	-3.85E-1	1.27E-1
PENRE	MJ	9.60E-1	3.61E-3	1.44E-3	9.65E-1	3.80E-3	4.42E-2	2.15E-4	-4.75E-1	5.38E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.60E-1	3.61E-3	1.44E-3	9.65E-1	3.80E-3	4.42E-2	2.15E-4	-4.75E-1	5.38E-1
PET	MJ	1.45E+0	3.66E-3	2.55E-2	1.48E+0	3.85E-3	4.70E-2	2.22E-4	-8.61E-1	6.65E-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	6.00E-4	3.85E-7	1.46E-6	6.02E-4	4.05E-7	4.28E-5	2.46E-7	-2.27E-4	4.19E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.29E-7	8.70E-9	2.73E-13	7.37E-7	9.14E-9	7.29E-8	2.50E-10	-5.48E-7	2.71E-7
NHWD	kg	4.83E-3	2.11E-4	1.05E-6	5.05E-3	2.22E-4	2.04E-3	8.86E-4	-2.19E-3	6.00E-3
RWD	kg	1.51E-6	2.31E-8	1.10E-13	1.53E-6	2.43E-8	1.68E-7	1.31E-9	-7.51E-7	9.72E-7
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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