

Environmental Profile

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

Ecochain v3.5.80



Product: 3004690 - PVC Electro Coupler WT 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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.65E-3	4.32E-5	1.45E-4	4.83E-3	2.33E-4	5.07E-2	7.56E-5	-2.05E-2	3.54E-2
GWP-f	kg CO2 eq	3.80E-2	4.31E-5	1.46E-4	3.82E-2	2.33E-4	1.70E-2	7.56E-5	-2.12E-2	3.43E-2
GWP-b	kg CO2 eq	-3.34E-2	2.62E-8	-1.54E-6	-3.34E-2	1.41E-7	3.37E-2	9.26E-8	7.60E-4	1.07E-3
GWP-luluc	kg CO2 eq	4.66E-5	1.53E-8	1.49E-7	4.68E-5	8.24E-8	3.02E-6	2.07E-9	-2.84E-5	2.15E-5
ODP	kg CFC11 eq	1.09E-8	9.94E-12	8.26E-12	1.09E-8	5.37E-11	8.46E-10	2.77E-12	-6.26E-9	5.52E-9
AP	mol H+ eq	1.82E-4	2.46E-7	1.47E-6	1.84E-4	1.33E-6	1.65E-5	6.78E-8	-7.64E-5	1.26E-4
EP-fw	kg P eq	1.49E-6	3.55E-10	8.24E-9	1.49E-6	1.92E-9	1.01E-7	9.18E-11	-6.62E-7	9.35E-7
EP-m	kg N eq	3.51E-5	8.79E-8	1.55E-7	3.53E-5	4.75E-7	4.54E-6	4.08E-8	-1.71E-5	2.33E-5
EP-T	mol N eq	3.89E-4	9.69E-7	1.85E-6	3.92E-4	5.23E-6	5.02E-5	2.69E-7	-1.92E-4	2.55E-4
POCP	kg NMVOC eq	1.45E-4	2.77E-7	6.28E-7	1.46E-4	1.50E-6	1.47E-5	9.30E-8	-6.71E-5	9.49E-5
ADP-mm	kg Sb eq	9.37E-7	1.12E-9	1.97E-8	9.58E-7	6.03E-9	5.99E-8	6.90E-11	-2.89E-7	7.35E-7
ADP-f	MJ	8.90E-1	6.62E-4	1.36E-3	8.92E-1	3.58E-3	4.13E-2	2.03E-4	-4.38E-1	4.99E-1
WDP	m3 depriv.	4.02E-2	2.03E-6	5.22E-5	4.02E-2	1.10E-5	1.48E-3	1.74E-6	-1.73E-2	2.44E-2
PM	disease inc.	1.83E-9	3.89E-12	9.08E-12	1.84E-9	2.10E-11	2.03E-10	1.39E-12	-9.35E-10	1.14E-9
IR	kBq U-235 eq	1.60E-3	2.89E-6	1.02E-6	1.61E-3	1.56E-5	1.49E-4	9.23E-7	-7.67E-4	1.01E-3
ETP-fw	CTUe	7.40E-1	5.38E-4	1.21E-2	7.53E-1	2.90E-3	2.84E-1	3.06E-3	-3.39E-1	7.03E-1
HTP-c	CTUh	3.19E-11	1.91E-14	6.17E-13	3.26E-11	1.03E-13	6.19E-12	5.89E-15	-1.82E-11	2.07E-11
HTP-nc	CTUh	6.49E-10	6.41E-13	1.57E-11	6.65E-10	3.46E-12	1.13E-10	5.92E-13	-3.07E-10	4.76E-10
SQP	Pt	2.93E+0	5.67E-4	2.24E-3	2.94E+0	3.06E-3	2.63E-2	5.17E-4	-2.52E+0	4.51E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.85E-1	9.50E-6	2.40E-2	5.09E-1	5.13E-5	2.78E-3	7.33E-6	-3.88E-1	1.24E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.85E-1	9.50E-6	2.40E-2	5.09E-1	5.13E-5	2.78E-3	7.33E-6	-3.88E-1	1.24E-1
PENRE	MJ	9.54E-1	7.03E-4	1.44E-3	9.57E-1	3.80E-3	4.40E-2	2.15E-4	-4.74E-1	5.30E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.54E-1	7.03E-4	1.44E-3	9.57E-1	3.80E-3	4.40E-2	2.15E-4	-4.74E-1	5.30E-1
PET	MJ	1.44E+0	7.13E-4	2.55E-2	1.47E+0	3.85E-3	4.67E-2	2.22E-4	-8.62E-1	6.55E-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	5.97E-4	7.49E-8	1.46E-6	5.99E-4	4.05E-7	4.27E-5	2.46E-7	-2.29E-4	4.13E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.00E-7	1.69E-9	2.73E-13	7.02E-7	9.14E-9	7.23E-8	2.50E-10	-5.18E-7	2.65E-7
NHWD	kg	4.62E-3	4.10E-5	1.05E-6	4.67E-3	2.22E-4	2.03E-3	8.86E-4	-2.18E-3	5.62E-3
RWD	kg	1.50E-6	4.50E-9	1.10E-13	1.50E-6	2.43E-8	1.67E-7	1.31E-9	-7.58E-7	9.35E-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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