

Environmental Profile

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

Ecochain v3.5.80



Product: 3004683 - PVC Electro Coupler CR 3/4" ;
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	1.50E-2	2.95E-4	1.45E-4	1.54E-2	3.65E-4	5.43E-2	1.17E-4	-2.61E-2	4.41E-2
GWP-f	kg CO2 eq	4.82E-2	2.95E-4	1.46E-4	4.87E-2	3.65E-4	2.07E-2	1.17E-4	-2.68E-2	4.30E-2
GWP-b	kg CO2 eq	-3.33E-2	1.79E-7	-1.54E-6	-3.33E-2	2.21E-7	3.37E-2	1.46E-7	6.77E-4	1.07E-3
GWP-luluc	kg CO2 eq	5.42E-5	1.04E-7	1.49E-7	5.45E-5	1.29E-7	4.71E-6	3.10E-9	-3.17E-5	2.76E-5
ODP	kg CFC11 eq	1.67E-8	6.79E-11	8.26E-12	1.68E-8	8.40E-11	1.32E-9	4.32E-12	-9.09E-9	9.11E-9
AP	mol H+ eq	2.28E-4	1.68E-6	1.47E-6	2.31E-4	2.08E-6	2.43E-5	1.05E-7	-9.74E-5	1.60E-4
EP-fw	kg P eq	1.93E-6	2.43E-9	8.24E-9	1.94E-6	3.00E-9	1.58E-7	1.39E-10	-8.66E-7	1.24E-6
EP-m	kg N eq	4.26E-5	6.01E-7	1.55E-7	4.34E-5	7.43E-7	6.39E-6	6.47E-8	-2.07E-5	2.99E-5
EP-T	mol N eq	4.69E-4	6.62E-6	1.85E-6	4.78E-4	8.19E-6	7.06E-5	4.20E-7	-2.30E-4	3.26E-4
POCP	kg NMVOC eq	1.73E-4	1.89E-6	6.28E-7	1.75E-4	2.34E-6	2.08E-5	1.45E-7	-8.05E-5	1.18E-4
ADP-mm	kg Sb eq	1.21E-6	7.63E-9	1.97E-8	1.23E-6	9.43E-9	9.04E-8	1.06E-10	-4.04E-7	9.29E-7
ADP-f	MJ	1.15E+0	4.53E-3	1.36E-3	1.16E+0	5.60E-3	6.23E-2	3.16E-4	-5.74E-1	6.52E-1
WDP	m3 depriv.	5.75E-2	1.39E-5	5.22E-5	5.75E-2	1.72E-5	2.34E-3	2.26E-6	-2.53E-2	3.46E-2
PM	disease inc.	2.12E-9	2.66E-11	9.08E-12	2.16E-9	3.29E-11	2.97E-10	2.17E-12	-1.07E-9	1.43E-9
IR	kBq U-235 eq	2.16E-3	1.98E-5	1.02E-6	2.18E-3	2.45E-5	2.23E-4	1.45E-6	-1.03E-3	1.40E-3
ETP-fw	CTUe	9.11E-1	3.68E-3	1.21E-2	9.27E-1	4.54E-3	4.54E-1	4.96E-3	-4.14E-1	9.76E-1
HTP-c	CTUh	3.87E-11	1.31E-13	6.17E-13	3.95E-11	1.62E-13	8.36E-12	8.87E-15	-2.11E-11	2.69E-11
HTP-nc	CTUh	8.81E-10	4.38E-12	1.57E-11	9.01E-10	5.42E-12	1.71E-10	9.53E-13	-4.09E-10	6.69E-10
SQP	Pt	2.96E+0	3.87E-3	2.24E-3	2.97E+0	4.79E-3	3.89E-2	8.08E-4	-2.52E+0	4.94E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.18E-1	6.49E-5	2.40E-2	5.42E-1	8.03E-5	4.33E-3	1.17E-5	-3.93E-1	1.54E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.18E-1	6.49E-5	2.40E-2	5.42E-1	8.03E-5	4.33E-3	1.17E-5	-3.93E-1	1.54E-1
PENRE	MJ	1.23E+0	4.81E-3	1.44E-3	1.24E+0	5.94E-3	6.63E-2	3.35E-4	-6.20E-1	6.93E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.23E+0	4.81E-3	1.44E-3	1.24E+0	5.94E-3	6.63E-2	3.35E-4	-6.20E-1	6.93E-1
PET	MJ	1.75E+0	4.87E-3	2.55E-2	1.78E+0	6.02E-3	7.06E-2	3.47E-4	-1.01E+0	8.47E-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	7.77E-4	5.12E-7	1.46E-6	7.79E-4	6.33E-7	6.62E-5	3.86E-7	-3.12E-4	5.34E-4

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.06E-7	1.16E-8	2.73E-13	9.17E-7	1.43E-8	1.06E-7	3.86E-10	-6.31E-7	4.07E-7
NHWD	kg	5.55E-3	2.81E-4	1.05E-6	5.83E-3	3.47E-4	2.77E-3	1.39E-3	-2.60E-3	7.73E-3
RWD	kg	1.98E-6	3.08E-8	1.10E-13	2.01E-6	3.81E-8	2.45E-7	2.05E-9	-9.86E-7	1.31E-6
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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