

Environmental Profile

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

Ecochain v3.5.64



Product: 3079787 – Tigris K5 Wallbox Elbow 16 DK
Unit: 1 Piece
Manufacturer: Wavin – DE – Twist – Handmade

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide – Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 29-11-2022
End of validity: 29-11-2027
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 – DE – Twist – Handmade (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	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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

Environmental impacts and parameters

GWP-total = EF Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change – Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change – Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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	Total
GWP-total	kg CO2 eq	2.80E-1	1.61E-3	4.66E-4	2.82E-1	2.82E-1
GWP-f	kg CO2 eq	3.26E-1	1.61E-3	3.43E-4	3.28E-1	3.28E-1
GWP-b	kg CO2 eq	-4.75E-2	9.76E-7	1.23E-4	-4.73E-2	-4.73E-2
GWP-luluc	kg CO2 eq	1.46E-3	5.69E-7	5.29E-7	1.46E-3	1.46E-3
ODP	kg CFC11 eq	5.15E-8	3.70E-10	5.24E-11	5.19E-8	5.19E-8
AP	mol H+ eq	9.72E-3	9.15E-6	2.84E-6	9.73E-3	9.73E-3
EP-fw	kg P eq	7.73E-5	1.32E-8	1.22E-8	7.73E-5	7.73E-5
EP-m	kg N eq	6.58E-4	3.28E-6	1.35E-6	6.62E-4	6.62E-4
EP-T	mol N eq	8.85E-3	3.61E-5	1.27E-5	8.90E-3	8.90E-3
POCP	kg NMVOC eq	2.75E-3	1.03E-5	3.54E-6	2.77E-3	2.77E-3
ADP-mm	kg Sb eq	5.45E-4	4.16E-8	2.53E-9	5.45E-4	5.45E-4
ADP-f	MJ	5.00E+0	2.47E-2	3.52E-3	5.03E+0	5.03E+0
WDP	m3 depriv.	2.74E-1	7.57E-5	4.61E-3	2.79E-1	2.79E-1
PM	disease inc.	3.20E-8	1.45E-10	7.42E-11	3.22E-8	3.22E-8
IR	kBq U-235 eq	1.24E-2	1.08E-4	1.71E-5	1.25E-2	1.25E-2
ETP-fw	CTUe	1.10E+2	2.00E-2	8.22E-3	1.10E+2	1.10E+2
HTP-c	CTUh	3.06E-9	7.13E-13	3.56E-13	3.06E-9	3.06E-9
HTP-nc	CTUh	1.05E-7	2.39E-11	6.08E-12	1.05E-7	1.05E-7
SQP	Pt	6.60E+0	2.11E-2	1.59E-3	6.63E+0	6.63E+0
Resource use	Unit	A1	A2	A3	A1-A3	Total
PERE	MJ	1.78E+0	3.54E-4	3.18E-4	1.78E+0	1.78E+0
PERM	MJ	0	0	0	0	0
PERT	MJ	1.78E+0	3.54E-4	3.18E-4	1.78E+0	1.78E+0
PENRE	MJ	5.36E+0	2.62E-2	3.70E-3	5.39E+0	5.39E+0
PENRM	MJ	0	0	0	0	0
PENRT	MJ	5.36E+0	2.62E-2	3.70E-3	5.39E+0	5.39E+0
PET	MJ	7.14E+0	2.65E-2	4.01E-3	7.17E+0	7.17E+0
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m3	7.08E-3	2.79E-6	1.07E-4	7.19E-3	7.19E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	Total
HWD	kg	7.17E-5	6.31E-8	1.06E-8	7.18E-5	7.18E-5
NHWD	kg	1.68E-1	1.53E-3	8.84E-5	1.70E-1	1.70E-1
RWD	kg	1.13E-5	1.68E-7	2.62E-8	1.15E-5	1.15E-5
CRU	kg	0	0	0	0	0
MFR	kg	0	0	0	0	0
MER	kg	0	0	0	0	0
EE	MJ	0	0	0	0	0
EET	MJ	0	0	0	0	0
EEE	MJ	0	0	0	0	0



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