

Environmental Profile

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

Ecochain v3.5.64



Product: 3010687 - K1 Manifold adapter male 3/4"
Unit: 1 Piece
Manufacturer: Wavin - DE - Twist - Handmade

Wavin Tigris K1 is proven and perfected to deliver high performance and significant cost savings in a wide range of commercial plumbing and heating projects. Its patented design has been relentlessly engineered to optimise all the benefits of a composite metal-plastic press-fit system and deliver the optimum solution for sanitary, potable water and heating applications, including re-circulating systems.

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]

Statement of Confidentiality

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	Total
GWP-total	kg CO2 eq	1.91E-1	1.33E-3	5.48E-4	1.92E-1	1.92E-1
GWP-f	kg CO2 eq	2.36E-1	1.33E-3	4.03E-4	2.38E-1	2.38E-1
GWP-b	kg CO2 eq	-4.75E-2	8.08E-7	1.44E-4	-4.73E-2	-4.73E-2
GWP-luluc	kg CO2 eq	1.76E-3	4.71E-7	6.22E-7	1.77E-3	1.77E-3
ODP	kg CFC11 eq	5.77E-8	3.07E-10	6.16E-11	5.80E-8	5.80E-8
AP	mol H+ eq	1.29E-3	7.58E-6	3.35E-6	1.30E-3	1.30E-3
EP-fw	kg P eq	9.52E-6	1.09E-8	1.44E-8	9.54E-6	9.54E-6
EP-m	kg N eq	2.28E-4	2.71E-6	1.59E-6	2.32E-4	2.32E-4
EP-T	mol N eq	2.53E-3	2.99E-5	1.50E-5	2.57E-3	2.57E-3
POCP	kg NMVOC eq	1.18E-3	8.54E-6	4.17E-6	1.19E-3	1.19E-3
ADP-mm	kg Sb eq	5.04E-6	3.44E-8	2.98E-9	5.07E-6	5.07E-6
ADP-f	MJ	4.30E+0	2.04E-2	4.14E-3	4.33E+0	4.33E+0
WDP	m3 depriv.	2.54E-1	6.27E-5	5.42E-3	2.59E-1	2.59E-1
PM	disease inc.	1.18E-8	1.20E-10	8.74E-11	1.21E-8	1.21E-8
IR	kBq U-235 eq	7.41E-3	8.93E-5	2.01E-5	7.52E-3	7.52E-3
ETP-fw	CTUe	3.43E+1	1.66E-2	9.67E-3	3.43E+1	3.43E+1
HTP-c	CTUh	1.60E-9	5.90E-13	4.18E-13	1.60E-9	1.60E-9
HTP-nc	CTUh	6.34E-9	1.98E-11	7.15E-12	6.37E-9	6.37E-9
SQP	Pt	5.12E+0	1.75E-2	1.88E-3	5.14E+0	5.14E+0
Resource use	Unit	A1	A2	A3	A1-A3	Total
PERE	MJ	1.64E+0	2.93E-4	3.74E-4	1.64E+0	1.64E+0
PERM	MJ	0	0	0	0	0
PERT	MJ	1.64E+0	2.93E-4	3.74E-4	1.64E+0	1.64E+0
PENRE	MJ	4.62E+0	2.17E-2	4.35E-3	4.65E+0	4.65E+0
PENRM	MJ	0	0	0	0	0
PENRT	MJ	4.62E+0	2.17E-2	4.35E-3	4.65E+0	4.65E+0
PET	MJ	6.26E+0	2.20E-2	4.72E-3	6.29E+0	6.29E+0
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m3	6.32E-3	2.31E-6	1.26E-4	6.45E-3	6.45E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	Total
HWD	kg	4.13E-6	5.22E-8	1.25E-8	4.20E-6	4.20E-6
NHWD	kg	1.18E-1	1.27E-3	1.04E-4	1.19E-1	1.19E-1
RWD	kg	7.05E-6	1.39E-7	3.08E-8	7.22E-6	7.22E-6
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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