

Environmental Profile

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

Ecochain v3.5.80



Product: 3061208 - Tigris PEXc/AI/PEIns9GY 16x2.0 L=50CorRD
Unit: 1 piece
Manufacturer: Wavin - PL - MPC

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 30-06-2023
End of validity: 30-06-2028
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 - MPC (2021). (☑ = 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	3.00E+1	9.55E-1	1.32E+0	3.23E+1	1.08E-1	3.51E+1	4.18E-1	-5.26E+0	6.26E+1
GWP-f	kg CO2 eq	4.63E+1	9.54E-1	9.03E-1	4.82E+1	1.08E-1	1.79E+1	4.17E-1	-7.19E+0	5.94E+1
GWP-b	kg CO2 eq	-1.64E+1	4.34E-4	4.18E-1	-1.60E+1	6.54E-5	1.71E+1	1.33E-3	1.92E+0	3.08E+0
GWP-luluc	kg CO2 eq	9.88E-2	3.52E-4	5.09E-4	9.97E-2	3.81E-5	1.36E-4	8.44E-6	5.68E-3	1.06E-1
ODP	kg CFC11 eq	2.25E-6	2.10E-7	5.25E-8	2.51E-6	2.48E-8	6.32E-8	1.06E-8	-1.29E-6	1.31E-6
AP	mol H+ eq	2.45E-1	5.76E-3	4.81E-3	2.56E-1	6.14E-4	3.74E-3	2.60E-4	1.48E-2	2.75E-1
EP-fw	kg P eq	1.54E-3	9.58E-6	3.00E-5	1.58E-3	8.86E-7	5.62E-6	3.89E-7	-5.43E-5	1.54E-3
EP-m	kg N eq	4.37E-2	2.00E-3	7.73E-4	4.64E-2	2.20E-4	1.56E-3	1.71E-4	-1.74E-3	4.67E-2
EP-T	mol N eq	4.87E-1	2.21E-2	7.72E-3	5.17E-1	2.42E-3	1.75E-2	1.05E-3	-2.27E-2	5.15E-1
POCP	kg NMVOC eq	1.67E-1	6.28E-3	2.53E-3	1.76E-1	6.92E-4	4.84E-3	3.91E-4	-9.52E-3	1.72E-1
ADP-mm	kg Sb eq	4.88E-4	2.40E-5	5.53E-5	5.68E-4	2.79E-6	6.99E-6	2.60E-7	-1.65E-3	-1.07E-3
ADP-f	MJ	9.37E+2	1.44E+1	7.03E+0	9.59E+2	1.65E+0	4.18E+0	7.90E-1	-1.73E+2	7.92E+2
WDP	m3 depriv.	1.94E+1	5.12E-2	2.11E-1	1.97E+1	5.07E-3	4.39E-2	3.84E-3	-3.21E+0	1.65E+1
PM	disease inc.	2.73E-6	8.52E-8	4.03E-8	2.85E-6	9.72E-9	4.16E-8	5.27E-9	5.27E-8	2.96E-6
IR	kBq U-235 eq	1.15E+0	6.02E-2	9.02E-3	1.22E+0	7.23E-3	1.74E-2	3.98E-3	-1.86E-1	1.06E+0
ETP-fw	CTUe	1.03E+3	1.28E+1	3.87E+1	1.08E+3	1.34E+0	1.01E+1	2.74E+2	-5.74E+1	1.31E+3
HTP-c	CTUh	4.14E-8	4.17E-10	2.01E-9	4.38E-8	4.78E-11	2.78E-9	2.79E-11	2.13E-9	4.88E-8
HTP-nc	CTUh	7.42E-7	1.40E-8	4.89E-8	8.05E-7	1.60E-9	2.24E-8	6.06E-10	6.79E-8	8.97E-7
SQP	Pt	1.55E+3	1.24E+1	7.42E+0	1.57E+3	1.41E+0	2.66E+0	1.93E+0	-1.49E+3	9.13E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.55E+2	7.26E-4	6.49E+1	3.20E+2	2.37E-2	1.48E-1	4.60E-2	-2.27E+2	9.35E+1
PERM	MJ	0	1.79E-1	0	1.79E-1	0	0	0	0	1.79E-1
PERT	MJ	2.55E+2	1.79E-1	6.49E+1	3.20E+2	2.37E-2	1.48E-1	4.60E-2	-2.27E+2	9.37E+1
PENRE	MJ	1.00E+3	1.14E-1	7.55E+0	1.01E+3	1.76E+0	4.45E+0	8.38E-1	-1.93E+2	8.25E+2
PENRM	MJ	0	1.51E+1	0	1.51E+1	0	0	0	0	1.51E+1
PENRT	MJ	1.00E+3	1.53E+1	7.55E+0	1.03E+3	1.76E+0	4.45E+0	8.38E-1	-1.93E+2	8.40E+2
PET	MJ	1.26E+3	1.54E+1	7.24E+1	1.35E+3	1.78E+0	4.60E+0	8.84E-1	-4.19E+2	9.34E+2
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	4.66E-1	1.74E-3	5.84E-3	4.74E-1	1.87E-4	4.35E-3	9.87E-4	-6.24E-2	4.17E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.37E-3	3.63E-5	6.01E-6	8.41E-3	4.23E-6	1.33E-5	9.44E-7	-3.55E-3	4.88E-3
NHWD	kg	7.09E+0	9.05E-1	9.99E-2	8.10E+0	1.02E-1	2.88E-1	3.28E+0	4.83E-1	1.23E+1
RWD	kg	1.20E-3	9.44E-5	8.78E-6	1.30E-3	1.12E-5	2.42E-5	5.23E-6	-2.05E-4	1.13E-3
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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