

Environmental Profile

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

Ecochain v3.5.80



Product: 4062992 - Tigris PEXc/Al/PE P.Ins6BL 16x2.0 L=50
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	3.19E+1	8.50E-1	5.37E-1	3.33E+1	7.73E-2	1.38E+1	2.83E-1	1.22E-1	4.75E+1
GWP-f	kg CO2 eq	3.34E+1	8.49E-1	3.43E-1	3.46E+1	7.72E-2	1.16E+1	2.82E-1	-9.26E-1	4.57E+1
GWP-b	kg CO2 eq	-1.63E+0	3.86E-4	1.93E-1	-1.44E+0	4.69E-5	2.17E+0	1.23E-3	1.03E+0	1.77E+0
GWP-luluc	kg CO2 eq	8.06E-2	3.14E-4	1.60E-4	8.11E-2	2.73E-5	6.04E-5	6.52E-6	1.89E-2	1.00E-1
ODP	kg CFC11 eq	1.41E-6	1.87E-7	2.00E-8	1.62E-6	1.78E-8	2.90E-8	7.70E-9	-5.95E-7	1.08E-6
AP	mol H+ eq	1.82E-1	5.15E-3	1.48E-3	1.89E-1	4.40E-4	1.97E-3	1.91E-4	3.46E-2	2.26E-1
EP-fw	kg P eq	1.14E-3	8.52E-6	9.71E-6	1.16E-3	6.35E-7	2.74E-6	3.01E-7	1.19E-4	1.28E-3
EP-m	kg N eq	2.98E-2	1.79E-3	2.79E-4	3.19E-2	1.57E-4	8.40E-4	1.22E-4	3.65E-3	3.66E-2
EP-T	mol N eq	3.33E-1	1.97E-2	2.63E-3	3.55E-1	1.73E-3	9.45E-3	7.74E-4	3.98E-2	4.07E-1
POCP	kg NMVOC eq	1.13E-1	5.60E-3	8.52E-4	1.20E-1	4.96E-4	2.60E-3	2.81E-4	1.15E-2	1.35E-1
ADP-mm	kg Sb eq	2.58E-4	2.14E-5	1.57E-5	2.95E-4	2.00E-6	3.07E-6	1.91E-7	-1.61E-3	-1.31E-3
ADP-f	MJ	6.34E+2	1.28E+1	2.56E+0	6.50E+2	1.18E+0	1.84E+0	5.80E-1	-6.70E+1	5.86E+2
WDP	m3 depriv.	1.40E+1	4.55E-2	7.12E-2	1.41E+1	3.64E-3	1.90E-2	2.97E-3	-1.26E+0	1.29E+1
PM	disease inc.	1.94E-6	7.58E-8	1.41E-8	2.03E-6	6.97E-9	2.15E-8	3.83E-9	4.07E-7	2.47E-6
IR	kBq U-235 eq	7.61E-1	5.36E-2	3.64E-3	8.19E-1	5.18E-3	7.21E-3	3.00E-3	-1.94E-2	8.15E-1
ETP-fw	CTUe	7.33E+2	1.14E+1	1.18E+1	7.56E+2	9.62E-1	5.85E+0	2.74E+2	7.15E+1	1.11E+3
HTP-c	CTUh	3.10E-8	3.72E-10	6.20E-10	3.20E-8	3.42E-11	1.74E-9	2.29E-11	8.14E-9	4.19E-8
HTP-nc	CTUh	5.94E-7	1.24E-8	1.48E-8	6.22E-7	1.15E-9	1.36E-8	4.89E-10	1.33E-7	7.70E-7
SQP	Pt	2.52E+2	1.10E+1	2.31E+0	2.66E+2	1.01E+0	1.11E+0	1.39E+0	-3.04E+2	-3.45E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.27E+1	7.26E-4	1.80E+1	8.07E+1	1.70E-2	6.93E-2	3.76E-2	-4.42E+1	3.66E+1
PERM	MJ	0	1.59E-1	0	1.59E-1	0	0	0	0	1.59E-1
PERT	MJ	6.27E+1	1.59E-1	1.80E+1	8.08E+1	1.70E-2	6.93E-2	3.76E-2	-4.42E+1	3.67E+1
PENRE	MJ	6.79E+2	1.14E-1	2.76E+0	6.81E+2	1.26E+0	1.96E+0	6.14E-1	-7.67E+1	6.09E+2
PENRM	MJ	0	1.35E+1	0	1.35E+1	0	0	0	0	1.35E+1
PENRT	MJ	6.79E+2	1.36E+1	2.76E+0	6.95E+2	1.26E+0	1.96E+0	6.14E-1	-7.67E+1	6.22E+2
PET	MJ	7.41E+2	1.37E+1	2.07E+1	7.76E+2	1.27E+0	2.03E+0	6.52E-1	-1.21E+2	6.59E+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	3.21E-1	1.55E-3	1.97E-3	3.24E-1	1.34E-4	2.35E-3	7.26E-4	-8.71E-3	3.19E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	8.17E-3	3.22E-5	2.76E-6	8.20E-3	3.03E-6	6.62E-6	6.92E-7	-3.39E-3	4.83E-3
NHWD	kg	4.89E+0	8.05E-1	4.54E-2	5.74E+0	7.34E-2	1.27E-1	2.35E+0	1.15E+0	9.44E+0
RWD	kg	7.84E-4	8.40E-5	4.04E-6	8.73E-4	8.06E-6	9.87E-6	3.85E-6	-1.74E-5	8.77E-4
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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