

Environmental Profile

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

Ecochain v3.5.80



Product: 3013507 - Tigris PEXc/AI/PE P.16x2.0 L=75 CorBK
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	5.26E+1	1.14E+0	1.41E+0	5.52E+1	1.34E-1	2.41E+1	5.03E-1	-2.11E+0	7.78E+1
GWP-f	kg CO2 eq	5.58E+1	1.14E+0	1.10E+0	5.80E+1	1.33E-1	2.05E+1	5.01E-1	-3.10E+0	7.60E+1
GWP-b	kg CO2 eq	-3.24E+0	5.17E-4	3.12E-1	-2.93E+0	8.10E-5	3.62E+0	1.90E-3	9.58E-1	1.65E+0
GWP-luluc	kg CO2 eq	1.21E-1	4.22E-4	8.13E-4	1.22E-1	4.72E-5	8.13E-5	1.09E-5	3.21E-2	1.55E-1
ODP	kg CFC11 eq	2.52E-6	2.51E-7	6.33E-8	2.84E-6	3.07E-8	3.82E-8	1.32E-8	-1.06E-6	1.85E-6
AP	mol H+ eq	3.00E-1	6.95E-3	7.86E-3	3.15E-1	7.60E-4	3.05E-3	3.26E-4	5.28E-2	3.72E-1
EP-fw	kg P eq	1.83E-3	1.14E-5	4.62E-5	1.88E-3	1.10E-6	3.84E-6	5.02E-7	2.23E-4	2.11E-3
EP-m	kg N eq	4.93E-2	2.41E-3	1.03E-3	5.27E-2	2.72E-4	1.32E-3	2.11E-4	5.50E-3	6.00E-2
EP-T	mol N eq	5.52E-1	2.65E-2	1.11E-2	5.89E-1	3.00E-3	1.49E-2	1.32E-3	6.03E-2	6.69E-1
POCP	kg NMVOC eq	1.87E-1	7.54E-3	3.71E-3	1.98E-1	8.57E-4	4.07E-3	4.85E-4	1.67E-2	2.20E-1
ADP-mm	kg Sb eq	4.39E-4	2.87E-5	9.81E-5	5.66E-4	3.45E-6	3.55E-6	3.26E-7	-2.41E-3	-1.84E-3
ADP-f	MJ	1.09E+3	1.72E+1	9.20E+0	1.11E+3	2.05E+0	2.38E+0	9.91E-1	-1.29E+2	9.90E+2
WDP	m3 depriv.	2.10E+1	6.11E-2	3.09E-1	2.14E+1	6.29E-3	3.00E-2	4.88E-3	-1.14E+0	2.03E+1
PM	disease inc.	3.18E-6	1.02E-7	5.65E-8	3.34E-6	1.20E-8	3.09E-8	6.57E-9	6.50E-7	4.04E-6
IR	kBq U-235 eq	1.24E+0	7.19E-2	9.73E-3	1.33E+0	8.95E-3	9.00E-3	5.07E-3	-5.65E-3	1.34E+0
ETP-fw	CTUe	1.14E+3	1.53E+1	6.38E+1	1.22E+3	1.66E+0	8.50E+0	4.11E+2	1.47E+2	1.79E+3
HTP-c	CTUh	4.85E-8	4.99E-10	3.29E-9	5.23E-8	5.92E-11	2.82E-9	3.72E-11	1.22E-8	6.74E-8
HTP-nc	CTUh	9.37E-7	1.67E-8	8.18E-8	1.04E-6	1.98E-9	2.21E-8	8.01E-10	2.07E-7	1.27E-6
SQP	Pt	4.35E+2	1.48E+1	1.20E+1	4.62E+2	1.75E+0	1.44E+0	2.40E+0	-3.94E+2	7.30E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.01E+2	1.09E-3	1.18E+2	2.19E+2	2.94E-2	9.63E-2	6.12E-2	-5.38E+1	1.65E+2
PERM	MJ	0	2.13E-1	0	2.13E-1	0	0	0	0	2.13E-1
PERT	MJ	1.01E+2	2.14E-1	1.18E+2	2.19E+2	2.94E-2	9.63E-2	6.12E-2	-5.38E+1	1.65E+2
PENRE	MJ	1.16E+3	1.72E-1	9.84E+0	1.17E+3	2.17E+0	2.54E+0	1.05E+0	-1.47E+2	1.03E+3
PENRM	MJ	0	1.81E+1	0	1.81E+1	0	0	0	0	1.81E+1
PENRT	MJ	1.16E+3	1.82E+1	9.84E+0	1.19E+3	2.17E+0	2.54E+0	1.05E+0	-1.47E+2	1.05E+3
PET	MJ	1.26E+3	1.84E+1	1.28E+2	1.41E+3	2.20E+0	2.64E+0	1.11E+0	-2.01E+2	1.22E+3
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	5.23E-1	2.08E-3	8.59E-3	5.34E-1	2.32E-4	3.89E-3	1.24E-3	6.34E-3	5.46E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.23E-2	4.32E-5	4.54E-6	1.23E-2	5.24E-6	9.29E-6	1.18E-6	-5.11E-3	7.24E-3
NHWD	kg	7.94E+0	1.08E+0	7.85E-2	9.09E+0	1.27E-1	1.78E-1	4.07E+0	1.73E+0	1.52E+1
RWD	kg	1.33E-3	1.13E-4	6.64E-6	1.45E-3	1.39E-5	1.20E-5	6.58E-6	-8.74E-6	1.47E-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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