

Environmental Profile

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

Ecochain v3.5.80



Product: 4013437 - Tigris PEXc/AI/PE P.14x2.0 L=75 CorRD
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]; **PENRT** = 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

This document and supporting material contain confidential and proprietary business information of Wavin - PL - MPC. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - PL - MPC.

Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.76E+1	7.04E-1	1.73E+0	5.00E+1	1.21E-1	2.24E+1	4.58E-1	-2.30E+0	7.07E+1
GWP-f	kg CO2 eq	5.07E+1	7.04E-1	1.44E+0	5.29E+1	1.21E-1	1.88E+1	4.57E-1	-3.33E+0	6.89E+1
GWP-b	kg CO2 eq	-3.24E+0	3.17E-4	2.85E-1	-2.96E+0	7.34E-5	3.63E+0	1.68E-3	1.00E+0	1.68E+0
GWP-luluc	kg CO2 eq	1.09E-1	2.61E-4	1.18E-3	1.11E-1	4.28E-5	7.86E-5	9.81E-6	2.69E-2	1.38E-1
ODP	kg CFC11 eq	2.13E-6	1.55E-7	8.24E-8	2.36E-6	2.79E-8	3.70E-8	1.20E-8	-1.00E-6	1.44E-6
AP	mol H+ eq	2.72E-1	4.37E-3	1.15E-2	2.88E-1	6.89E-4	2.86E-3	2.95E-4	4.50E-2	3.37E-1
EP-fw	kg P eq	1.70E-3	7.04E-6	6.64E-5	1.77E-3	9.95E-7	3.66E-6	4.52E-7	1.79E-4	1.95E-3
EP-m	kg N eq	4.50E-2	1.50E-3	1.40E-3	4.79E-2	2.46E-4	1.24E-3	1.91E-4	4.47E-3	5.40E-2
EP-T	mol N eq	5.05E-1	1.66E-2	1.56E-2	5.37E-1	2.72E-3	1.40E-2	1.20E-3	4.87E-2	6.04E-1
POCP	kg NMVOC eq	1.70E-1	4.71E-3	5.23E-3	1.80E-1	7.76E-4	3.81E-3	4.39E-4	1.34E-2	1.98E-1
ADP-mm	kg Sb eq	4.59E-4	1.76E-5	1.47E-4	6.24E-4	3.13E-6	3.55E-6	2.95E-7	-2.12E-3	-1.49E-3
ADP-f	MJ	9.83E+2	1.06E+1	1.24E+1	1.01E+3	1.86E+0	2.33E+0	8.96E-1	-1.24E+2	8.87E+2
WDP	m3 depriv.	1.94E+1	3.76E-2	4.36E-1	1.99E+1	5.70E-3	2.89E-2	4.49E-3	-1.26E+0	1.87E+1
PM	disease inc.	2.85E-6	6.26E-8	7.84E-8	2.99E-6	1.09E-8	2.93E-8	5.95E-9	5.49E-7	3.58E-6
IR	kBq U-235 eq	1.09E+0	4.44E-2	1.19E-2	1.15E+0	8.11E-3	8.87E-3	4.57E-3	-1.93E-2	1.15E+0
ETP-fw	CTUe	1.05E+3	9.41E+0	9.38E+1	1.15E+3	1.51E+0	7.97E+0	3.62E+2	1.15E+2	1.64E+3
HTP-c	CTUh	4.38E-8	3.08E-10	4.81E-9	4.89E-8	5.36E-11	2.66E-9	3.34E-11	1.05E-8	6.21E-8
HTP-nc	CTUh	8.46E-7	1.03E-8	1.21E-7	9.77E-7	1.80E-9	2.06E-8	7.18E-10	1.78E-7	1.18E-6
SQP	Pt	4.27E+2	9.09E+0	1.76E+1	4.54E+2	1.59E+0	1.40E+0	2.17E+0	-4.02E+2	5.72E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.62E+1	9.39E-4	1.78E+2	2.74E+2	2.66E-2	9.24E-2	5.48E-2	-5.65E+1	2.18E+2
PERM	MJ	0	1.31E-1	0	1.31E-1	0	0	0	0	1.31E-1
PERT	MJ	9.62E+1	1.32E-1	1.78E+2	2.74E+2	2.66E-2	9.24E-2	5.48E-2	-5.65E+1	2.18E+2
PENRE	MJ	1.05E+3	1.48E-1	1.33E+1	1.07E+3	1.97E+0	2.48E+0	9.50E-1	-1.40E+2	9.30E+2
PENRM	MJ	0	1.11E+1	0	1.11E+1	0	0	0	0	1.11E+1
PENRT	MJ	1.05E+3	1.12E+1	1.33E+1	1.08E+3	1.97E+0	2.48E+0	9.50E-1	-1.40E+2	9.41E+2
PET	MJ	1.15E+3	1.14E+1	1.91E+2	1.35E+3	2.00E+0	2.57E+0	1.00E+0	-1.97E+2	1.16E+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	4.88E-1	1.28E-3	1.21E-2	5.01E-1	2.10E-4	3.63E-3	1.12E-3	-1.23E-3	5.05E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.08E-2	2.66E-5	4.21E-6	1.09E-2	4.75E-6	8.92E-6	1.07E-6	-4.51E-3	6.36E-3
NHWD	kg	7.25E+0	6.63E-1	7.58E-2	7.99E+0	1.15E-1	1.75E-1	3.69E+0	1.49E+0	1.35E+1
RWD	kg	1.13E-3	6.96E-5	6.16E-6	1.21E-3	1.26E-5	1.19E-5	5.94E-6	-2.28E-5	1.21E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777