

Environmental Profile

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

Ecochain v3.5.80



Product: 4023001 - Tigris PEXc/Al/PE P.25x2.5 L=50 CorBL
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]

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	7.68E+1	1.46E+0	1.53E+0	7.98E+1	1.89E-1	3.46E+1	7.00E-1	-1.17E+0	1.14E+2
GWP-f	kg CO2 eq	8.24E+1	1.45E+0	1.07E+0	8.50E+1	1.89E-1	2.85E+1	6.98E-1	-2.51E+0	1.12E+2
GWP-b	kg CO2 eq	-5.80E+0	6.61E-4	4.57E-1	-5.34E+0	1.15E-4	6.16E+0	2.93E-3	1.29E+0	2.11E+0
GWP-luluc	kg CO2 eq	1.86E-1	5.37E-4	6.41E-4	1.87E-1	6.70E-5	1.15E-4	1.58E-5	5.20E-2	2.40E-1
ODP	kg CFC11 eq	3.44E-6	3.21E-7	6.21E-8	3.82E-6	4.36E-8	5.41E-8	1.88E-8	-1.43E-6	2.51E-6
AP	mol H+ eq	4.54E-1	8.79E-3	6.09E-3	4.69E-1	1.08E-3	4.28E-3	4.66E-4	8.55E-2	5.60E-1
EP-fw	kg P eq	2.60E-3	1.46E-5	3.74E-5	2.65E-3	1.56E-6	5.40E-6	7.28E-7	3.70E-4	3.03E-3
EP-m	kg N eq	7.44E-2	3.05E-3	9.33E-4	7.83E-2	3.86E-4	1.85E-3	2.96E-4	9.34E-3	9.02E-2
EP-T	mol N eq	8.32E-1	3.37E-2	9.49E-3	8.76E-1	4.25E-3	2.09E-2	1.89E-3	1.02E-1	1.01E+0
POCP	kg NMVOC eq	2.79E-1	9.58E-3	3.12E-3	2.91E-1	1.21E-3	5.71E-3	6.89E-4	2.85E-2	3.27E-1
ADP-mm	kg Sb eq	7.24E-4	3.66E-5	7.16E-5	8.32E-4	4.90E-6	5.05E-6	4.66E-7	-3.80E-3	-2.96E-3
ADP-f	MJ	1.54E+3	2.19E+1	8.46E+0	1.57E+3	2.90E+0	3.42E+0	1.42E+0	-1.64E+2	1.41E+3
WDP	m3 depriv.	3.01E+1	7.80E-2	2.60E-1	3.05E+1	8.91E-3	3.80E-2	6.94E-3	-1.42E+0	2.91E+1
PM	disease inc.	4.82E-6	1.30E-7	4.92E-8	5.00E-6	1.71E-8	4.40E-8	9.36E-9	1.04E-6	6.11E-6
IR	kBq U-235 eq	1.70E+0	9.18E-2	1.04E-2	1.81E+0	1.27E-2	1.30E-2	7.31E-3	1.16E-2	1.85E+0
ETP-fw	CTUe	1.74E+3	1.95E+1	4.91E+1	1.81E+3	2.36E+0	1.17E+1	6.49E+2	2.49E+2	2.72E+3
HTP-c	CTUh	7.54E-8	6.36E-10	2.55E-9	7.86E-8	8.39E-11	3.92E-9	5.50E-11	1.93E-8	1.02E-7
HTP-nc	CTUh	1.45E-6	2.13E-8	6.23E-8	1.53E-6	2.81E-9	3.08E-8	1.18E-9	3.32E-7	1.90E-6
SQP	Pt	7.13E+2	1.89E+1	9.38E+0	7.41E+2	2.48E+0	2.12E+0	3.41E+0	-6.20E+2	1.29E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.59E+2	1.15E-3	8.45E+1	2.44E+2	4.17E-2	1.36E-1	9.08E-2	-8.34E+1	1.61E+2
PERM	MJ	0	2.72E-1	0	2.72E-1	0	0	0	0	2.72E-1
PERT	MJ	1.59E+2	2.73E-1	8.45E+1	2.44E+2	4.17E-2	1.36E-1	9.08E-2	-8.34E+1	1.61E+2
PENRE	MJ	1.65E+3	1.81E-1	9.07E+0	1.66E+3	3.08E+0	3.65E+0	1.50E+0	-1.88E+2	1.48E+3
PENRM	MJ	0	2.31E+1	0	2.31E+1	0	0	0	0	2.31E+1
PENRT	MJ	1.65E+3	2.33E+1	9.07E+0	1.68E+3	3.08E+0	3.65E+0	1.50E+0	-1.88E+2	1.50E+3
PET	MJ	1.81E+3	2.35E+1	9.36E+1	1.92E+3	3.13E+0	3.78E+0	1.59E+0	-2.71E+2	1.66E+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	7.76E-1	2.66E-3	7.22E-3	7.86E-1	3.29E-4	5.35E-3	1.78E-3	1.98E-2	8.13E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.94E-2	5.52E-5	6.58E-6	1.94E-2	7.43E-6	1.31E-5	1.69E-6	-8.02E-3	1.14E-2
NHWD	kg	1.22E+1	1.38E+0	1.10E-1	1.37E+1	1.80E-1	2.58E-1	5.77E+0	2.74E+0	2.26E+1
RWD	kg	1.75E-3	1.44E-4	9.62E-6	1.91E-3	1.98E-5	1.74E-5	9.41E-6	9.74E-6	1.96E-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