

Environmental Profile

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

Ecochain v3.5.64



Product: 3018710 - End Cap Protection BL 125
Unit: 1 piece
Manufacturer: Wavin - IT - SM Maddalena

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 24-11-2022
End of validity: 24-11-2027
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 - IT - SM Maddalena (2020). (☑ = 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 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	9.13E-2	1.29E-3	6.75E-3	9.94E-2	1.21E-3	5.38E-2	5.50E-4	-4.45E-2	1.10E-1
GWP-f	kg CO2 eq	1.06E-1	1.29E-3	5.78E-3	1.13E-1	1.21E-3	3.47E-2	5.50E-4	-5.42E-2	9.48E-2
GWP-b	kg CO2 eq	-1.43E-2	7.83E-7	4.88E-4	-1.38E-2	7.35E-7	1.90E-2	4.00E-7	9.81E-3	1.50E-2
GWP-luluc	kg CO2 eq	1.51E-4	4.57E-7	4.88E-4	6.40E-4	4.29E-7	7.09E-6	2.22E-8	-8.72E-5	5.60E-4
ODP	kg CFC11 eq	1.26E-8	2.97E-10	5.80E-10	1.34E-8	2.79E-10	1.04E-9	1.51E-11	-2.07E-9	1.27E-8
AP	mol H+ eq	8.17E-4	7.35E-6	2.33E-5	8.47E-4	6.90E-6	4.14E-5	4.16E-7	-2.11E-4	6.85E-4
EP-fw	kg P eq	4.05E-6	1.06E-8	8.98E-8	4.15E-6	9.96E-9	2.08E-7	8.40E-10	-1.56E-6	2.81E-6
EP-m	kg N eq	1.14E-4	2.63E-6	3.94E-6	1.20E-4	2.47E-6	1.23E-5	1.40E-7	-4.01E-5	9.52E-5
EP-T	mol N eq	1.53E-3	2.90E-5	4.42E-5	1.60E-3	2.72E-5	1.35E-4	1.55E-6	-4.52E-4	1.32E-3
POCP	kg NMVOC eq	3.46E-4	8.28E-6	1.37E-5	3.68E-4	7.77E-6	4.23E-5	5.63E-7	-1.80E-4	2.38E-4
ADP-mm	kg Sb eq	1.30E-5	3.34E-8	1.41E-7	1.32E-5	3.13E-8	1.70E-7	5.20E-10	-4.69E-7	1.30E-5
ADP-f	MJ	1.15E+0	1.98E-2	7.61E-2	1.25E+0	1.86E-2	1.29E-1	1.15E-3	-1.74E+0	-3.45E-1
WDP	m3 depriv.	8.22E-2	6.08E-5	2.69E-2	1.09E-1	5.70E-5	2.26E-3	4.93E-5	-4.52E-2	6.63E-2
PM	disease inc.	7.02E-9	1.16E-10	2.33E-10	7.37E-9	1.09E-10	6.83E-10	7.92E-12	-2.50E-9	5.66E-9
IR	kBq U-235 eq	3.49E-3	8.65E-5	7.09E-5	3.65E-3	8.12E-5	4.02E-4	4.51E-6	-1.49E-3	2.65E-3
ETP-fw	CTUe	4.12E+0	1.61E-2	1.20E-1	4.26E+0	1.51E-2	1.52E-1	9.49E-4	-1.02E+0	3.40E+0
HTP-c	CTUh	9.98E-11	5.72E-13	6.40E-12	1.07E-10	5.37E-13	4.24E-11	6.04E-14	-1.98E-11	1.30E-10
HTP-nc	CTUh	2.38E-9	1.92E-11	1.33E-10	2.53E-9	1.80E-11	2.78E-10	8.12E-13	-4.98E-10	2.33E-9
SQP	Pt	2.10E+0	1.69E-2	1.39E-2	2.13E+0	1.59E-2	1.01E-1	2.73E-3	-2.87E+0	-6.21E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.37E-1	2.84E-4	2.63E-1	6.00E-1	2.67E-4	6.12E-3	1.99E-5	-5.01E-1	1.05E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.37E-1	2.84E-4	2.63E-1	6.00E-1	2.67E-4	6.12E-3	1.99E-5	-5.01E-1	1.05E-1
PENRE	MJ	1.24E+0	2.10E-2	8.30E-2	1.34E+0	1.97E-2	1.37E-1	1.22E-3	-1.87E+0	-3.71E-1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.24E+0	2.10E-2	8.30E-2	1.34E+0	1.97E-2	1.37E-1	1.22E-3	-1.87E+0	-3.71E-1
PET	MJ	1.57E+0	2.13E-2	3.46E-1	1.94E+0	2.00E-2	1.43E-1	1.24E-3	-2.37E+0	-2.66E-1
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	2.10E-3	2.24E-6	6.39E-4	2.74E-3	2.10E-6	6.89E-5	1.20E-6	-8.41E-4	1.97E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.53E-6	5.06E-8	7.39E-8	2.66E-6	4.75E-8	2.42E-7	1.76E-9	-4.27E-7	2.52E-6
NHWD	kg	2.02E-2	1.23E-3	7.20E-4	2.21E-2	1.15E-3	6.48E-3	4.61E-3	-2.66E-3	3.17E-2
RWD	kg	3.45E-6	1.35E-7	7.89E-8	3.67E-6	1.26E-7	5.17E-7	6.87E-9	-1.38E-6	2.94E-6
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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