

Environmental Profile

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

Ecochain v3.5.71



Product: 3066578 - PVC-U U Drain Plain Stopper 110
 Unit: 1 piece
 Manufacturer: Wavin - UK - Chippenham - Verified

LCA standard: EN15804+A2 (2019)
 Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
 Externally verified: Yes
 Issue date: 09-02-2023
 End of validity: 09-02-2028
 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 - UK - Chippenham - Verified (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

A1 Raw material supply A2 Transport A3 Manufacturing

Construction process stage

A4 Transport gate to site
 A5 Assembly / Construction installation process

Use stage

B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment
 B6 Operational energy use B7 Operational water use

End-of-Life stage

C1 De-construction demolition C2 Transport C3 Waste processing
 C4 Disposal

Benefits and loads beyond the system boundaries

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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.13E-1	9.18E-3	1.96E-2	2.42E-1	2.85E-3	7.72E-2	8.91E-4	-1.19E-1	2.04E-1
GWP-f	kg CO2 eq	2.11E-1	9.18E-3	1.90E-2	2.39E-1	2.84E-3	7.73E-2	8.91E-4	-1.18E-1	2.02E-1
GWP-b	kg CO2 eq	1.88E-3	-1.97E-6	5.31E-4	2.41E-3	1.73E-6	-7.32E-5	1.12E-6	-8.22E-4	1.52E-3
GWP-luluc	kg CO2 eq	1.76E-4	6.04E-6	1.55E-5	1.98E-4	1.01E-6	3.50E-5	2.37E-8	-7.73E-5	1.57E-4
ODP	kg CFC11 eq	1.18E-7	1.87E-9	1.78E-9	1.21E-7	6.55E-10	9.58E-9	3.35E-11	-5.99E-8	7.17E-8
AP	mol H+ eq	9.80E-4	2.75E-4	1.01E-4	1.36E-3	1.62E-5	1.61E-4	8.14E-7	-4.51E-4	1.08E-3
EP-fw	kg P eq	9.65E-6	4.13E-8	2.62E-7	9.95E-6	2.34E-8	1.17E-6	1.07E-9	-4.40E-6	6.75E-6
EP-m	kg N eq	1.65E-4	6.80E-5	2.05E-5	2.54E-4	5.79E-6	3.88E-5	4.99E-7	-7.78E-5	2.21E-4
EP-T	mol N eq	1.80E-3	7.56E-4	2.22E-4	2.78E-3	6.39E-5	4.28E-4	3.24E-6	-8.27E-4	2.45E-3
POCP	kg NMVOC eq	6.09E-4	1.96E-4	1.00E-4	9.05E-4	1.83E-5	1.28E-4	1.12E-6	-2.87E-4	7.66E-4
ADP-mm	kg Sb eq	1.26E-4	8.47E-8	4.45E-7	1.27E-4	7.35E-8	6.36E-7	8.18E-10	-2.44E-6	1.25E-4
ADP-f	MJ	5.38E+0	1.20E-1	2.10E-1	5.71E+0	4.36E-2	4.41E-1	2.44E-3	-2.87E+0	3.32E+0
WDP	m3 depriv.	3.56E-1	1.97E-4	6.52E-3	3.63E-1	1.34E-4	1.76E-2	1.69E-5	-1.72E-1	2.08E-1
PM	disease inc.	6.35E-9	3.35E-10	6.86E-10	7.37E-9	2.57E-10	1.99E-9	1.68E-11	-2.85E-9	6.78E-9
IR	kBq U-235 eq	1.17E-2	5.14E-4	5.38E-4	1.27E-2	1.91E-4	1.55E-3	1.12E-5	-5.54E-3	8.95E-3
ETP-fw	CTUe	4.59E+0	7.93E-2	5.33E-1	5.21E+0	3.54E-2	3.44E+0	3.81E-2	-1.66E+0	7.06E+0
HTP-c	CTUh	1.65E-10	5.09E-12	2.09E-11	1.91E-10	1.26E-12	4.93E-11	6.79E-14	-6.30E-11	1.79E-10
HTP-nc	CTUh	5.30E-9	6.77E-11	1.22E-9	6.59E-9	4.22E-11	1.19E-9	7.33E-12	-2.18E-9	5.64E-9
SQP	Pt	6.92E-1	2.60E-2	7.02E-2	7.88E-1	3.73E-2	2.71E-1	6.25E-3	-3.08E-1	7.94E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.65E-1	9.10E-4	1.09E+0	1.35E+0	6.26E-4	3.21E-2	9.00E-5	-1.25E-1	1.26E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.65E-1	9.10E-4	1.09E+0	1.35E+0	6.26E-4	3.21E-2	9.00E-5	-1.25E-1	1.26E+0
PENRE	MJ	5.77E+0	1.27E-1	2.23E-1	6.12E+0	4.63E-2	4.69E-1	2.59E-3	-3.09E+0	3.54E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.77E+0	1.27E-1	2.23E-1	6.12E+0	4.63E-2	4.69E-1	2.59E-3	-3.09E+0	3.54E+0
PET	MJ	6.03E+0	1.28E-1	1.31E+0	7.47E+0	4.70E-2	5.01E-1	2.68E-3	-3.22E+0	4.80E+0
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	3.88E-3	7.06E-6	1.87E-4	4.07E-3	4.94E-6	4.81E-4	2.99E-6	-1.79E-3	2.77E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.95E-5	1.32E-7	2.08E-6	2.17E-5	1.12E-7	7.10E-7	2.98E-9	-2.38E-6	2.01E-5
NHWD	kg	2.08E-2	1.09E-3	4.22E-4	2.23E-2	2.70E-3	1.59E-2	1.08E-2	-9.16E-3	4.26E-2
RWD	kg	1.02E-5	8.30E-7	5.50E-7	1.15E-5	2.97E-7	1.65E-6	1.59E-8	-4.88E-6	8.62E-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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