

Environmental Profile

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

Ecochain v3.5.71



Product: 4040918 - Wavin R315 IC E-Base 45° BK 110 L/RH
Unit: 1 piece
Manufacturer: Wavin - UK - Chippenham - Verified

Wavin offers Inspection Chambers in 315, 450 and 600mm diameters, approved to BS EN 13598-2 for deep applications. They are suitable for use in both adoptable and non-adoptable applications to a maximum depth of 3 metres, depending on the chamber and the application. There is also a 200mm diameter Inspection Chamber approved to BS EN 13598-1.

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					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

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	8.52E-1	1.07E-2	1.21E+0	2.07E+0	7.44E-2	2.79E+0	3.64E-2	-3.59E+0	1.39E+0
GWP-f	kg CO2 eq	8.65E-1	1.07E-2	1.19E+0	2.07E+0	7.43E-2	2.80E+0	3.64E-2	-3.58E+0	1.40E+0
GWP-b	kg CO2 eq	-1.31E-2	6.36E-6	1.14E-2	-1.63E-3	4.51E-5	-2.79E-3	3.22E-5	-1.11E-2	-1.55E-2
GWP-luluc	kg CO2 eq	6.54E-4	3.81E-6	1.30E-3	1.96E-3	2.63E-5	4.02E-4	6.19E-7	-6.60E-4	1.73E-3
ODP	kg CFC11 eq	1.88E-7	2.45E-9	7.78E-8	2.68E-7	1.71E-8	5.34E-8	9.20E-10	-1.57E-7	1.83E-7
AP	mol H+ eq	4.87E-3	6.42E-5	7.13E-3	1.21E-2	4.23E-4	2.29E-3	2.20E-5	-9.53E-3	5.27E-3
EP-fw	kg P eq	2.80E-5	8.71E-8	1.76E-5	4.57E-5	6.11E-7	1.17E-5	2.85E-8	-3.73E-5	2.07E-5
EP-m	kg N eq	7.68E-4	2.25E-5	1.17E-3	1.96E-3	1.51E-4	6.74E-4	1.71E-5	-1.71E-3	1.10E-3
EP-T	mol N eq	9.11E-3	2.48E-4	1.33E-2	2.26E-2	1.67E-3	7.42E-3	8.92E-5	-1.89E-2	1.29E-2
POCP	kg NMVOC eq	3.87E-3	7.06E-5	4.87E-3	8.81E-3	4.77E-4	2.32E-3	3.34E-5	-8.65E-3	2.99E-3
ADP-mm	kg Sb eq	3.09E-4	2.73E-7	3.79E-5	3.47E-4	1.92E-6	8.75E-6	2.20E-8	-3.14E-5	3.26E-4
ADP-f	MJ	2.41E+1	1.63E-1	1.33E+1	3.75E+1	1.14E+0	7.03E+0	6.72E-2	-1.09E+2	-6.30E+1
WDP	m3 depriv.	5.31E-1	4.98E-4	3.44E-1	8.76E-1	3.50E-3	1.45E-1	3.08E-4	-1.81E+0	-7.90E-1
PM	disease inc.	5.84E-8	9.54E-10	5.08E-8	1.10E-7	6.71E-9	3.64E-8	4.61E-10	-7.91E-8	7.47E-8
IR	kBq U-235 eq	6.92E-2	7.13E-4	2.56E-2	9.55E-2	4.98E-3	2.11E-2	3.13E-4	-5.17E-2	7.02E-2
ETP-fw	CTUe	1.79E+1	1.32E-1	4.14E+1	5.94E+1	9.26E-1	9.02E+0	6.43E-2	-1.36E+1	5.58E+1
HTP-c	CTUh	4.99E-10	4.74E-12	1.62E-9	2.13E-9	3.30E-11	9.33E-10	1.63E-12	-5.77E-10	2.52E-9
HTP-nc	CTUh	1.13E-8	1.57E-10	5.57E-8	6.72E-8	1.10E-9	1.21E-8	3.80E-11	-1.60E-8	6.44E-8
SQP	Pt	5.43E+0	1.38E-1	5.21E+0	1.08E+1	9.76E-1	5.57E+0	1.72E-1	-3.04E+0	1.45E+1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.13E-1	2.33E-3	9.50E+1	9.59E+1	1.64E-2	3.47E-1	2.66E-3	-1.33E+0	9.50E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.13E-1	2.33E-3	9.50E+1	9.59E+1	1.64E-2	3.47E-1	2.66E-3	-1.33E+0	9.50E+1
PENRE	MJ	2.57E+1	1.73E-1	1.41E+1	3.99E+1	1.21E+0	7.49E+0	7.13E-2	-1.17E+2	-6.86E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.57E+1	1.73E-1	1.41E+1	3.99E+1	1.21E+0	7.49E+0	7.13E-2	-1.17E+2	-6.86E+1
PET	MJ	2.66E+1	1.76E-1	1.09E+2	1.36E+2	1.23E+0	7.83E+0	7.39E-2	-1.19E+2	2.63E+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	1.34E-2	1.84E-5	1.10E-2	2.44E-2	1.29E-4	4.95E-3	8.31E-5	-2.75E-2	2.09E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.59E-5	4.15E-7	5.20E-5	6.84E-5	2.92E-6	1.18E-5	8.06E-8	-2.99E-5	5.33E-5
NHWD	kg	1.05E-1	1.00E-2	1.20E-2	1.27E-1	7.07E-2	3.57E-1	2.96E-1	-8.30E-2	7.68E-1
RWD	kg	9.21E-5	1.11E-6	1.38E-5	1.07E-4	7.76E-6	2.68E-5	4.39E-7	-4.81E-5	9.38E-5
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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