

Environmental Profile

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

Ecochain v3.5.80



Product: 4040654 - Wavin R600 IC E-Base Bent 90 BK 225
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

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: 08-06-2023
End of validity: 08-06-2028
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 -Buk - Extra products (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	4.26E+1	1.73E+0	2.18E-1	4.45E+1	8.04E-1	5.95E+1	3.88E-1	-4.20E+1	6.32E+1
GWP-f	kg CO2 eq	7.32E+1	1.73E+0	2.20E-1	7.52E+1	8.03E-1	2.84E+1	3.88E-1	-4.19E+1	6.29E+1
GWP-b	kg CO2 eq	-3.07E+1	1.05E-3	-2.32E-3	-3.07E+1	4.88E-4	3.10E+1	3.40E-4	-1.26E-1	2.10E-1
GWP-luluc	kg CO2 eq	3.75E-2	6.11E-4	2.25E-4	3.84E-2	2.84E-4	4.49E-3	6.75E-6	-2.07E-2	2.25E-2
ODP	kg CFC11 eq	3.80E-6	3.98E-7	1.24E-8	4.21E-6	1.85E-7	6.17E-7	9.79E-9	-2.38E-6	2.65E-6
AP	mol H+ eq	2.87E-1	9.83E-3	2.22E-3	2.99E-1	4.58E-3	2.63E-2	2.35E-4	-1.30E-1	2.00E-1
EP-fw	kg P eq	1.33E-3	1.42E-5	1.24E-5	1.36E-3	6.61E-6	1.30E-4	3.08E-7	-5.97E-4	8.97E-4
EP-m	kg N eq	5.05E-2	3.52E-3	2.34E-4	5.42E-2	1.64E-3	7.88E-3	1.70E-4	-2.56E-2	3.83E-2
EP-T	mol N eq	5.71E-1	3.88E-2	2.79E-3	6.12E-1	1.80E-2	8.69E-2	9.50E-4	-2.91E-1	4.28E-1
POCP	kg NMVOC eq	2.51E-1	1.11E-2	9.45E-4	2.63E-1	5.16E-3	2.70E-2	3.56E-4	-1.23E-1	1.73E-1
ADP-mm	kg Sb eq	2.99E-3	4.47E-5	2.96E-5	3.06E-3	2.08E-5	9.95E-5	2.37E-7	-3.78E-4	2.81E-3
ADP-f	MJ	2.41E+3	2.65E+1	2.04E+0	2.44E+3	1.23E+1	7.94E+1	7.16E-1	-1.23E+3	1.29E+3
WDP	m3 depriv.	4.68E+1	8.13E-2	7.85E-2	4.70E+1	3.78E-2	1.57E+0	3.90E-3	-2.15E+1	2.71E+1
PM	disease inc.	3.17E-6	1.56E-7	1.37E-8	3.34E-6	7.25E-8	4.17E-7	4.92E-9	-1.37E-6	2.46E-6
IR	kBq U-235 eq	1.97E+0	1.16E-1	1.53E-3	2.09E+0	5.39E-2	2.43E-1	3.32E-3	-7.53E-1	1.64E+0
ETP-fw	CTUe	6.28E+2	2.15E+1	1.82E+1	6.67E+2	1.00E+1	9.68E+1	6.55E-1	-2.75E+2	5.00E+2
HTP-c	CTUh	3.30E-8	7.66E-10	9.28E-10	3.47E-8	3.56E-10	1.14E-8	1.78E-11	-1.63E-8	3.02E-8
HTP-nc	CTUh	6.27E-7	2.56E-8	2.36E-8	6.76E-7	1.19E-8	1.37E-7	4.01E-10	-2.71E-7	5.54E-7
SQP	Pt	2.75E+3	2.27E+1	3.37E+0	2.77E+3	1.05E+1	6.31E+1	1.83E+0	-1.98E+3	8.68E+2
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.14E+2	3.80E-1	3.62E+1	5.51E+2	1.77E-1	3.87E+0	2.79E-2	-3.11E+2	2.44E+2
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.14E+2	3.80E-1	3.62E+1	5.51E+2	1.77E-1	3.87E+0	2.79E-2	-3.11E+2	2.44E+2
PENRE	MJ	2.58E+3	2.81E+1	2.17E+0	2.61E+3	1.31E+1	8.46E+1	7.59E-1	-1.33E+3	1.38E+3
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.58E+3	2.81E+1	2.17E+0	2.61E+3	1.31E+1	8.46E+1	7.59E-1	-1.33E+3	1.38E+3
PET	MJ	3.10E+3	2.85E+1	3.84E+1	3.16E+3	1.33E+1	8.85E+1	7.87E-1	-1.64E+3	1.62E+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	7.71E-1	3.00E-3	2.20E-3	7.76E-1	1.40E-3	5.21E-2	8.81E-4	-3.35E-1	4.95E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.04E-4	6.78E-5	4.11E-10	6.72E-4	3.15E-5	1.34E-4	8.64E-7	-4.66E-4	3.73E-4
NHWD	kg	4.38E+0	1.64E+0	1.59E-3	6.02E+0	7.64E-1	4.09E+0	3.15E+0	-2.01E+0	1.20E+1
RWD	kg	2.13E-3	1.80E-4	1.65E-10	2.31E-3	8.38E-5	3.10E-4	4.67E-6	-7.38E-4	1.97E-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



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