

Environmental Profile

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

Ecochain v3.5.71



Product: 3039853 - HBP 3/4 INCH X 6MTR BARR IRISH WH
Unit: 1 piece
Manufacturer: Wavin - UK - Doncaster - 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 - Doncaster - 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	2.92E+0	6.04E-2	3.51E-1	3.33E+0	1.89E-2	5.23E-1	8.19E-3	-1.54E+0	2.34E+0
GWP-f	kg CO2 eq	2.90E+0	6.03E-2	3.25E-1	3.29E+0	1.89E-2	5.24E-1	8.19E-3	-1.53E+0	2.31E+0
GWP-b	kg CO2 eq	1.25E-2	3.42E-5	2.55E-2	3.80E-2	1.15E-5	-7.42E-4	8.22E-6	-6.05E-3	3.12E-2
GWP-luluc	kg CO2 eq	2.40E-4	2.21E-5	1.18E-4	3.80E-4	6.69E-6	1.13E-4	1.59E-7	-2.36E-5	4.77E-4
ODP	kg CFC11 eq	4.31E-8	1.38E-8	3.75E-8	9.44E-8	4.36E-9	1.67E-8	2.24E-10	-2.85E-8	8.72E-8
AP	mol H+ eq	1.88E-2	4.22E-4	7.67E-4	2.00E-2	1.08E-4	6.27E-4	5.54E-6	-7.68E-3	1.31E-2
EP-fw	kg P eq	1.59E-5	4.84E-7	2.25E-6	1.86E-5	1.56E-7	3.33E-6	7.32E-9	-1.83E-6	2.03E-5
EP-m	kg N eq	2.22E-3	1.41E-4	1.65E-4	2.52E-3	3.85E-5	1.84E-4	1.01E-5	-1.02E-3	1.73E-3
EP-T	mol N eq	2.44E-2	1.55E-3	1.59E-3	2.76E-2	4.25E-4	2.01E-3	2.21E-5	-1.12E-2	1.88E-2
POCP	kg NMVOC eq	1.28E-2	4.37E-4	5.16E-4	1.37E-2	1.21E-4	6.24E-4	8.04E-6	-6.11E-3	8.35E-3
ADP-mm	kg Sb eq	2.25E-5	1.50E-6	3.20E-6	2.72E-5	4.89E-7	2.41E-6	5.43E-9	-6.14E-7	2.95E-5
ADP-f	MJ	6.43E+1	9.18E-1	4.60E+0	6.98E+1	2.90E-1	1.91E+0	1.65E-2	-3.37E+1	3.83E+1
WDP	m3 depriv.	5.77E-1	2.75E-3	4.46E-2	6.25E-1	8.90E-4	4.09E-2	7.62E-5	-1.70E-1	4.97E-1
PM	disease inc.	1.45E-7	5.27E-9	5.62E-9	1.56E-7	1.71E-9	9.82E-9	1.12E-10	-6.50E-8	1.03E-7
IR	kBq U-235 eq	1.42E-2	4.01E-3	3.88E-3	2.21E-2	1.27E-3	5.82E-3	7.94E-5	-2.14E-3	2.72E-2
ETP-fw	CTUe	9.24E+0	7.39E-1	3.93E+0	1.39E+1	2.36E-1	3.26E+0	3.83E-2	-1.19E+0	1.63E+1
HTP-c	CTUh	8.63E-10	2.70E-11	1.64E-10	1.05E-9	8.38E-12	2.63E-10	4.35E-13	-1.11E-10	1.21E-9
HTP-nc	CTUh	1.27E-8	8.71E-10	3.43E-9	1.70E-8	2.81E-10	3.45E-9	1.45E-11	-2.78E-9	1.80E-8
SQP	Pt	2.73E+0	7.59E-1	5.56E-1	4.05E+0	2.48E-1	1.49E+0	4.19E-2	-1.72E-1	5.65E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	6.76E-1	1.29E-2	7.56E+0	8.25E+0	4.16E-3	9.78E-2	7.54E-4	-1.69E-1	8.18E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	6.76E-1	1.29E-2	7.56E+0	8.25E+0	4.16E-3	9.78E-2	7.54E-4	-1.69E-1	8.18E+0
PENRE	MJ	6.90E+1	9.75E-1	5.04E+0	7.50E+1	3.08E-1	2.03E+0	1.75E-2	-3.63E+1	4.10E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.90E+1	9.75E-1	5.04E+0	7.50E+1	3.08E-1	2.03E+0	1.75E-2	-3.63E+1	4.10E+1
PET	MJ	6.97E+1	9.88E-1	1.26E+1	8.33E+1	3.12E-1	2.13E+0	1.82E-2	-3.65E+1	4.92E+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	1.37E-2	1.02E-4	1.33E-3	1.51E-2	3.28E-5	1.19E-3	2.05E-5	-3.55E-3	1.28E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.64E-6	2.29E-6	4.92E-6	1.48E-5	7.42E-7	3.15E-6	1.97E-8	-4.34E-6	1.44E-5
NHWD	kg	2.04E-1	5.47E-2	2.29E-2	2.81E-1	1.80E-2	9.15E-2	7.19E-2	-1.67E-2	4.46E-1
RWD	kg	1.43E-5	6.25E-6	3.72E-6	2.42E-5	1.97E-6	7.25E-6	1.09E-7	-2.36E-6	3.12E-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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