

Environmental Profile

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

Ecochain v3.5.71



Product: 3024347 - Tap conn washers 20 pck of flat 22mm
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	8.71E-2	5.93E-4	9.61E-3	9.73E-2	2.70E-4	7.99E-2	2.29E-4	-3.87E-2	1.39E-1
GWP-f	kg CO2 eq	8.88E-2	5.92E-4	8.81E-3	9.82E-2	2.70E-4	7.99E-2	2.29E-4	-3.87E-2	1.40E-1
GWP-b	kg CO2 eq	-1.76E-3	3.60E-7	7.99E-4	-9.57E-4	1.64E-7	3.36E-6	2.30E-7	1.32E-5	-9.40E-4
GWP-luluc	kg CO2 eq	6.96E-5	2.10E-7	1.96E-6	7.18E-5	9.55E-8	6.52E-7	4.46E-9	-2.77E-6	6.98E-5
ODP	kg CFC11 eq	1.43E-8	1.36E-10	1.11E-9	1.55E-8	6.22E-11	2.09E-10	6.25E-12	-4.25E-9	1.15E-8
AP	mol H+ eq	4.66E-4	3.37E-6	1.52E-5	4.85E-4	1.54E-6	1.32E-5	1.55E-7	-3.79E-5	4.62E-4
EP-fw	kg P eq	2.92E-6	4.87E-9	4.94E-8	2.98E-6	2.22E-9	2.42E-8	2.05E-10	-1.27E-7	2.88E-6
EP-m	kg N eq	7.66E-5	1.21E-6	3.92E-6	8.17E-5	5.50E-7	5.03E-6	2.93E-7	-1.03E-5	7.73E-5
EP-T	mol N eq	8.81E-4	1.33E-5	3.50E-5	9.29E-4	6.06E-6	5.58E-5	6.16E-7	-1.14E-4	8.78E-4
POCP	kg NMVOC eq	3.86E-4	3.80E-6	1.16E-5	4.01E-4	1.73E-6	1.45E-5	2.24E-7	-4.12E-5	3.77E-4
ADP-mm	kg Sb eq	2.21E-5	1.53E-8	4.93E-8	2.22E-5	6.98E-9	1.93E-8	1.51E-10	-7.17E-7	2.15E-5
ADP-f	MJ	2.42E+0	9.09E-3	1.29E-1	2.56E+0	4.14E-3	1.63E-2	4.59E-4	-6.82E-1	1.90E+0
WDP	m3 depriv.	5.83E-2	2.79E-5	1.05E-3	5.94E-2	1.27E-5	7.86E-4	2.12E-6	-3.20E-3	5.70E-2
PM	disease inc.	5.12E-9	5.35E-11	1.12E-10	5.29E-9	2.44E-11	1.02E-10	3.13E-12	-2.14E-10	5.20E-9
IR	kBq U-235 eq	5.73E-3	3.97E-5	9.81E-5	5.87E-3	1.81E-5	4.99E-5	2.22E-6	-3.70E-4	5.57E-3
ETP-fw	CTUe	1.64E+0	7.38E-3	6.95E-2	1.72E+0	3.36E-3	1.02E-1	9.70E-4	-8.43E-2	1.74E+0
HTP-c	CTUh	4.17E-11	2.63E-13	3.03E-12	4.50E-11	1.20E-13	4.28E-12	1.22E-14	-3.52E-12	4.58E-11
HTP-nc	CTUh	1.00E-9	8.80E-12	5.95E-11	1.07E-9	4.01E-12	7.10E-11	3.91E-13	-5.90E-11	1.09E-9
SQP	Pt	4.88E-1	7.78E-3	1.08E-2	5.06E-1	3.54E-3	1.01E-2	1.17E-3	-2.77E-2	4.93E-1
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	9.76E-2	1.30E-4	1.07E-1	2.05E-1	5.94E-5	7.41E-4	2.12E-5	-4.31E-3	2.02E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	9.76E-2	1.30E-4	1.07E-1	2.05E-1	5.94E-5	7.41E-4	2.12E-5	-4.31E-3	2.02E-1
PENRE	MJ	2.58E+0	9.65E-3	1.42E-1	2.74E+0	4.40E-3	1.75E-2	4.87E-4	-7.54E-1	2.00E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.58E+0	9.65E-3	1.42E-1	2.74E+0	4.40E-3	1.75E-2	4.87E-4	-7.54E-1	2.00E+0
PET	MJ	2.68E+0	9.78E-3	2.49E-1	2.94E+0	4.46E-3	1.83E-2	5.09E-4	-7.58E-1	2.21E+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	1.45E-3	1.03E-6	2.95E-5	1.48E-3	4.69E-7	7.72E-5	5.72E-7	-7.68E-5	1.48E-3

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.19E-6	2.32E-8	1.54E-7	1.37E-6	1.06E-8	6.51E-8	5.48E-10	-7.66E-7	6.77E-7
NHWD	kg	8.71E-3	5.63E-4	7.14E-4	9.99E-3	2.57E-4	2.78E-3	2.00E-3	-3.81E-4	1.46E-2
RWD	kg	7.23E-6	6.18E-8	1.16E-7	7.40E-6	2.82E-8	6.45E-8	3.03E-9	-4.86E-7	7.02E-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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