

Environmental Profile

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

Ecochain v3.5.80



Product: 3002729 - X-Stream Click Inlet 125SW/200 IT BK
Unit: 1 piece
Manufacturer: Wavin - PL -Buk - Extra products

Wavin X-Stream is a new generation of double-walled pipes and fittings made of polypropylene. The system is

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	4.00E+0	1.28E-2	1.45E-4	4.01E+0	5.22E-2	3.17E+0	1.83E-2	-2.44E+0	4.81E+0
GWP-f	kg CO2 eq	5.03E+0	1.28E-2	1.46E-4	5.04E+0	5.21E-2	1.99E+0	1.83E-2	-2.69E+0	4.41E+0
GWP-b	kg CO2 eq	-1.03E+0	7.77E-6	-1.54E-6	-1.03E+0	3.17E-5	1.18E+0	2.22E-5	2.50E-1	3.98E-1
GWP-luluc	kg CO2 eq	5.36E-3	4.53E-6	1.49E-7	5.36E-3	1.85E-5	6.16E-4	4.32E-7	-3.64E-3	2.35E-3
ODP	kg CFC11 eq	2.17E-6	2.95E-9	8.26E-12	2.18E-6	1.20E-8	1.69E-7	6.42E-10	-1.03E-6	1.33E-6
AP	mol H+ eq	2.32E-2	7.29E-5	1.47E-6	2.33E-2	2.97E-4	3.05E-3	1.55E-5	-1.04E-2	1.63E-2
EP-fw	kg P eq	2.06E-4	1.05E-7	8.24E-9	2.06E-4	4.29E-7	2.06E-5	1.99E-8	-1.04E-4	1.23E-4
EP-m	kg N eq	4.18E-3	2.61E-5	1.55E-7	4.21E-3	1.06E-4	7.75E-4	1.16E-5	-1.99E-3	3.12E-3
EP-T	mol N eq	4.50E-2	2.87E-4	1.85E-6	4.53E-2	1.17E-3	8.54E-3	6.23E-5	-2.18E-2	3.33E-2
POCP	kg NMVOC eq	1.61E-2	8.21E-5	6.28E-7	1.62E-2	3.35E-4	2.54E-3	2.17E-5	-7.46E-3	1.16E-2
ADP-mm	kg Sb eq	2.99E-4	3.31E-7	1.97E-8	2.99E-4	1.35E-6	1.18E-5	1.54E-8	-5.09E-5	2.62E-4
ADP-f	MJ	1.28E+2	1.96E-1	1.36E-3	1.28E+2	8.00E-1	8.07E+0	4.69E-2	-6.33E+1	7.37E+1
WDP	m3 depriv.	6.69E+0	6.03E-4	5.22E-5	6.69E+0	2.46E-3	3.10E-1	2.20E-4	-3.32E+0	3.68E+0
PM	disease inc.	2.00E-7	1.15E-9	9.08E-12	2.01E-7	4.71E-9	3.77E-8	3.22E-10	-9.75E-8	1.46E-7
IR	kBq U-235 eq	2.63E-1	8.58E-4	1.02E-6	2.64E-1	3.50E-3	2.85E-2	2.18E-4	-1.18E-1	1.79E-1
ETP-fw	CTUe	1.14E+2	1.59E-1	1.21E-2	1.15E+2	6.50E-1	5.96E+1	6.53E-1	-5.24E+1	1.23E+2
HTP-c	CTUh	3.62E-9	5.67E-12	6.17E-13	3.63E-9	2.31E-11	8.83E-10	1.23E-12	-1.61E-9	2.93E-9
HTP-nc	CTUh	1.01E-7	1.90E-10	1.57E-11	1.01E-7	7.75E-10	2.13E-8	1.28E-10	-4.30E-8	8.05E-8
SQP	Pt	1.16E+2	1.68E-1	2.24E-3	1.16E+2	6.85E-1	4.99E+0	1.20E-1	-1.28E+2	-6.05E+0
Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	3.09E+1	2.82E-3	2.40E-2	3.09E+1	1.15E-2	5.67E-1	1.83E-3	-2.19E+1	9.58E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	3.09E+1	2.82E-3	2.40E-2	3.09E+1	1.15E-2	5.67E-1	1.83E-3	-2.19E+1	9.58E+0
PENRE	MJ	1.37E+2	2.08E-1	1.44E-3	1.37E+2	8.50E-1	8.58E+0	4.97E-2	-6.83E+1	7.86E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.37E+2	2.08E-1	1.44E-3	1.37E+2	8.50E-1	8.58E+0	4.97E-2	-6.83E+1	7.86E+1
PET	MJ	1.68E+2	2.11E-1	2.55E-2	1.68E+2	8.61E-1	9.15E+0	5.16E-2	-9.02E+1	8.82E+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	8.08E-2	2.22E-5	1.46E-6	8.08E-2	9.06E-5	9.00E-3	5.79E-5	-4.23E-2	4.76E-2

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	9.62E-5	5.02E-7	2.73E-13	9.67E-5	2.05E-6	1.36E-5	5.63E-8	-5.55E-5	5.70E-5
NHWD	kg	5.08E-1	1.22E-2	1.05E-6	5.21E-1	4.96E-2	3.11E-1	2.07E-1	-2.18E-1	8.70E-1
RWD	kg	2.56E-4	1.34E-6	1.10E-13	2.58E-4	5.44E-6	3.11E-5	3.06E-7	-1.08E-4	1.86E-4
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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