

Environmental Profile

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

Ecochain v3.5.80



Product: 3044920 - PP-R TEE Wall fem. GY 25x1/2 PN20
Unit: 1 piece
Manufacturer: Wavin - CZ - Kostelec - Verified

Use the Ekoplastik System when you prefer an all plastic welded system or when you need pipes with larger diameters. The Ekoplastik system offers a maximum pipe diameter of 250 mm. Join pipes and fittings using a homogenous weld for secure and permanent connections.

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 27-01-2023
End of validity: 27-01-2028
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 - CZ - Kostelec - 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

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **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 SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.29	0	0	0.3	0	0	0	-0.03	0.28
ADPE	kg Sb-eq	9.54E-4	3.18E-7	7.32E-7	9.55E-4	6.20E-8	2.22E-7	5.88E-10	-4.45E-4	5.10E-4
ADPF	kg Sb-eq	2.90E-3	1.15E-4	6.47E-5	3.08E-3	1.74E-5	7.47E-5	8.29E-7	-1.28E-3	1.89E-3
GWP	kg CO2-eq	2.71E-1	1.67E-2	1.16E-2	3.00E-1	2.38E-3	4.41E-2	5.90E-4	-1.05E-1	2.41E-1
ODP	kg CFC-11-eq	1.27E-8	2.94E-9	1.69E-8	3.26E-8	4.41E-10	1.04E-9	1.99E-11	-5.75E-9	2.83E-8
POCP	kg ethene-eq	7.15E-4	1.47E-5	7.83E-6	7.37E-4	1.43E-6	7.71E-6	1.51E-7	-9.74E-5	6.49E-4
AP	kg SO2-eq	1.33E-2	2.11E-4	7.05E-5	1.36E-2	1.02E-5	4.25E-5	4.40E-7	-1.10E-3	1.26E-2
EP	kg PO4 3--eq	7.45E-4	2.71E-5	9.39E-6	7.81E-4	2.04E-6	7.26E-6	1.57E-7	-1.04E-4	6.86E-4
HTP	kg 1,4-DB-eq	2.15E+0	8.01E-3	1.36E-2	2.17E+0	1.02E-3	1.50E-2	5.32E-5	-1.48E-1	2.04E+0
FAETP	kg 1,4-DB-eq	4.99E-2	1.88E-4	4.85E-4	5.06E-2	2.98E-5	3.55E-4	4.81E-5	-6.25E-3	4.48E-2
MAETP	kg 1,4-DB-eq	2.17E+2	7.39E-1	1.27E+0	2.19E+2	1.06E-1	8.15E-1	4.86E-2	-2.10E+1	1.99E+2
TETP	kg 1,4-DB-eq	5.92E-3	2.61E-5	6.26E-4	6.57E-3	3.60E-6	4.58E-5	9.54E-8	-4.47E-4	6.17E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.80E-1	1.69E-2	1.36E-2	3.11E-1	2.40E-3	4.65E-2	6.89E-4	-1.04E-1	2.57E-1
GWP-f	kg CO2 eq	2.79E-1	1.68E-2	1.09E-2	3.07E-1	2.40E-3	4.42E-2	6.89E-4	-1.08E-1	2.46E-1
GWP-b	kg CO2 eq	5.56E-4	4.44E-6	2.52E-3	3.08E-3	1.45E-6	2.30E-3	6.19E-7	4.49E-3	9.87E-3
GWP-luluc	kg CO2 eq	3.19E-4	8.11E-6	1.48E-4	4.75E-4	8.48E-7	8.88E-6	1.72E-8	-1.28E-4	3.57E-4
ODP	kg CFC11 eq	1.36E-8	3.69E-9	9.54E-9	2.69E-8	5.52E-10	1.23E-9	2.49E-11	-5.91E-9	2.27E-8
AP	mol H+ eq	1.53E-2	2.67E-4	8.91E-5	1.56E-2	1.36E-5	5.47E-5	5.88E-7	-1.33E-3	1.44E-2
EP-fw	kg P eq	1.21E-4	1.12E-7	3.35E-7	1.22E-4	1.97E-8	2.81E-7	7.53E-10	-1.07E-5	1.11E-4
EP-m	kg N eq	8.26E-4	7.23E-5	1.73E-5	9.15E-4	4.88E-6	1.56E-5	3.22E-7	-1.63E-4	7.73E-4
EP-T	mol N eq	1.19E-2	8.01E-4	2.06E-4	1.29E-2	5.38E-5	1.73E-4	2.33E-6	-2.20E-3	1.09E-2
POCP	kg NMVOC eq	3.29E-3	2.14E-4	4.91E-5	3.56E-3	1.54E-5	5.36E-5	8.16E-7	-5.87E-4	3.04E-3
ADP-mm	kg Sb eq	9.54E-4	3.18E-7	7.32E-7	9.55E-4	6.20E-8	2.22E-7	5.88E-10	-4.45E-4	5.10E-4
ADP-f	MJ	5.81E+0	2.42E-1	2.39E+0	8.44E+0	3.68E-2	1.54E-1	1.77E-3	-2.67E+0	5.96E+0
WDP	m3 depriv.	2.20E-1	6.12E-4	4.42E-2	2.65E-1	1.13E-4	2.75E-3	3.20E-5	-8.05E-2	1.87E-1
PM	disease inc.	3.67E-8	1.14E-9	7.84E-10	3.87E-8	2.16E-10	8.77E-10	1.20E-11	-6.09E-9	3.37E-8
IR	kBq U-235 eq	1.00E-2	1.05E-3	2.78E-2	3.89E-2	1.61E-4	4.89E-4	7.91E-6	-4.47E-3	3.51E-2
ETP-fw	CTUe	1.49E+2	1.83E-1	8.17E-1	1.50E+2	2.99E-2	2.08E-1	1.38E-3	-2.15E+1	1.28E+2
HTP-c	CTUh	2.16E-9	8.26E-12	1.87E-11	2.19E-9	1.06E-12	2.18E-11	3.92E-14	-4.80E-10	1.73E-9
HTP-nc	CTUh	1.73E-7	1.98E-10	5.65E-10	1.74E-7	3.56E-11	2.92E-10	9.20E-13	-3.02E-8	1.44E-7
SQP	Pt	2.60E+0	1.49E-1	6.56E-1	3.40E+0	3.15E-2	1.33E-1	4.29E-3	-1.45E+0	2.12E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.79E-1	2.86E-3	3.35E-1	9.17E-1	5.28E-4	8.41E-3	5.13E-5	-3.28E-1	5.98E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.79E-1	2.86E-3	3.35E-1	9.17E-1	5.28E-4	8.41E-3	5.13E-5	-3.28E-1	5.98E-1
PENRE	MJ	6.22E+0	2.57E-1	2.40E+0	8.87E+0	3.90E-2	1.64E-1	1.88E-3	-2.87E+0	6.21E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	6.22E+0	2.57E-1	2.40E+0	8.87E+0	3.90E-2	1.64E-1	1.88E-3	-2.87E+0	6.21E+0
PET	MJ	6.80E+0	2.60E-1	2.73E+0	9.79E+0	3.96E-2	1.72E-1	1.93E-3	-3.20E+0	6.81E+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	4.99E-3	2.24E-5	1.40E-3	6.40E-3	4.16E-6	8.42E-5	2.09E-6	-1.75E-3	4.75E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.19E-4	4.86E-7	7.60E-8	1.20E-4	9.40E-8	2.70E-7	2.31E-9	-5.64E-5	6.38E-5
NHWD	kg	6.17E-2	1.02E-2	2.15E-3	7.40E-2	2.28E-3	7.43E-3	9.10E-3	-2.13E-2	7.15E-2
RWD	kg	8.54E-6	1.66E-6	1.14E-7	1.03E-5	2.50E-7	6.22E-7	1.16E-8	-3.71E-6	7.49E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777