

Environmental Profile

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

Ecochain v3.5.80



Product: 3079542 - EK PP-RCT Tee GY 110
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	0.22	0.02	0.05	0.28	0	0.09	0	-0.12	0.25
ADPE	kg Sb-eq	3.96E-5	3.82E-6	1.64E-5	5.98E-5	8.25E-7	4.12E-6	9.11E-9	-1.05E-5	5.42E-5
ADPF	kg Sb-eq	4.30E-2	1.07E-3	1.24E-3	4.53E-2	2.32E-4	1.56E-3	1.27E-5	-2.34E-2	2.37E-2
GWP	kg CO2-eq	2.51E+0	1.46E-1	2.24E-1	2.88E+0	3.16E-2	1.01E+0	1.28E-2	-1.53E+0	2.41E+0
ODP	kg CFC-11-eq	6.20E-8	2.71E-8	3.81E-7	4.70E-7	5.87E-9	2.10E-8	3.04E-10	-6.38E-8	4.34E-7
POCP	kg ethene-eq	2.08E-3	8.78E-5	1.61E-4	2.33E-3	1.90E-5	1.58E-4	2.92E-6	-1.01E-3	1.50E-3
AP	kg SO2-eq	7.98E-3	6.30E-4	1.53E-3	1.01E-2	1.36E-4	8.05E-4	6.71E-6	-3.88E-3	7.21E-3
EP	kg PO4 3--eq	7.98E-4	1.26E-4	1.97E-4	1.12E-3	2.72E-5	1.43E-4	2.92E-6	-4.28E-4	8.66E-4
HTP	kg 1,4-DB-eq	4.12E-1	6.26E-2	2.72E-1	7.46E-1	1.35E-2	3.17E-1	1.00E-3	-2.01E-1	8.77E-1
FAETP	kg 1,4-DB-eq	1.28E-2	1.83E-3	9.80E-3	2.44E-2	3.97E-4	7.25E-3	1.09E-3	-6.33E-3	2.68E-2
MAETP	kg 1,4-DB-eq	2.77E+1	6.55E+0	2.72E+1	6.15E+1	1.42E+0	1.67E+1	1.09E+0	-1.23E+1	6.83E+1
TETP	kg 1,4-DB-eq	1.97E-3	2.22E-4	1.41E-2	1.63E-2	4.80E-5	9.66E-4	1.64E-6	-1.67E-3	1.56E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.63E+0	1.48E-1	2.65E-1	3.04E+0	3.19E-2	1.06E+0	1.50E-2	-1.48E+0	2.67E+0
GWP-f	kg CO2 eq	2.62E+0	1.47E-1	2.14E-1	2.98E+0	3.19E-2	1.02E+0	1.50E-2	-1.58E+0	2.46E+0
GWP-b	kg CO2 eq	1.01E-2	8.96E-5	4.79E-2	5.81E-2	1.94E-5	4.46E-2	1.31E-5	9.98E-2	2.02E-1
GWP-luluc	kg CO2 eq	1.30E-3	5.22E-5	3.34E-3	4.69E-3	1.13E-5	1.82E-4	2.59E-7	-1.02E-3	3.87E-3
ODP	kg CFC11 eq	6.04E-8	3.40E-8	2.13E-7	3.07E-7	7.35E-9	2.49E-8	3.77E-10	-6.72E-8	2.73E-7
AP	mol H+ eq	9.67E-3	8.40E-4	1.94E-3	1.24E-2	1.82E-4	1.04E-3	9.01E-6	-4.69E-3	8.99E-3
EP-fw	kg P eq	4.53E-5	1.21E-6	7.05E-6	5.36E-5	2.63E-7	5.30E-6	1.18E-8	-2.55E-5	3.37E-5
EP-m	kg N eq	1.69E-3	3.01E-4	3.60E-4	2.35E-3	6.50E-5	3.08E-4	5.84E-6	-8.60E-4	1.87E-3
EP-T	mol N eq	1.89E-2	3.31E-3	4.44E-3	2.66E-2	7.17E-4	3.39E-3	3.66E-5	-9.58E-3	2.12E-2
POCP	kg NMVOC eq	8.21E-3	9.47E-4	1.03E-3	1.02E-2	2.05E-4	1.07E-3	1.37E-5	-4.12E-3	7.35E-3
ADP-mm	kg Sb eq	3.95E-5	3.82E-6	1.64E-5	5.97E-5	8.25E-7	4.11E-6	9.11E-9	-1.05E-5	5.41E-5
ADP-f	MJ	9.00E+1	2.26E+0	5.38E+1	1.46E+2	4.90E-1	3.22E+0	2.76E-2	-4.85E+1	1.01E+2
WDP	m3 depriv.	1.82E+0	6.95E-3	9.41E-1	2.77E+0	1.50E-3	6.20E-2	1.50E-4	-9.63E-1	1.87E+0
PM	disease inc.	8.75E-8	1.33E-8	1.60E-8	1.17E-7	2.88E-9	1.70E-8	1.89E-10	-4.48E-8	9.21E-8
IR	kBq U-235 eq	5.12E-2	9.90E-3	6.30E-1	6.91E-1	2.14E-3	9.84E-3	1.28E-4	-2.84E-2	6.75E-1
ETP-fw	CTUe	2.75E+1	1.84E+0	1.80E+1	4.74E+1	3.98E-1	3.72E+0	2.31E-2	-1.38E+1	3.78E+1
HTP-c	CTUh	6.51E-10	6.54E-11	3.91E-10	1.11E-9	1.42E-11	4.54E-10	6.82E-13	-3.11E-10	1.27E-9
HTP-nc	CTUh	1.81E-8	2.19E-9	1.23E-8	3.26E-8	4.74E-10	5.49E-9	1.49E-11	-9.11E-9	2.95E-8
SQP	Pt	7.71E+0	1.94E+0	1.47E+1	2.44E+1	4.19E-1	2.55E+0	7.07E-2	-2.01E+1	7.33E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.22E+0	3.25E-2	7.60E+0	9.86E+0	7.03E-3	1.57E-1	1.06E-3	-4.00E+0	6.03E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.22E+0	3.25E-2	7.60E+0	9.86E+0	7.03E-3	1.57E-1	1.06E-3	-4.00E+0	6.03E+0
PENRE	MJ	9.66E+1	2.40E+0	5.40E+1	1.53E+2	5.20E-1	3.43E+0	2.92E-2	-5.23E+1	1.05E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.66E+1	2.40E+0	5.40E+1	1.53E+2	5.20E-1	3.43E+0	2.92E-2	-5.23E+1	1.05E+2
PET	MJ	9.89E+1	2.44E+0	6.16E+1	1.63E+2	5.27E-1	3.59E+0	3.03E-2	-5.63E+1	1.11E+2
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	2.88E-2	2.56E-4	3.02E-2	5.92E-2	5.54E-5	1.85E-3	3.39E-5	-1.61E-2	4.51E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.32E-5	5.79E-6	1.08E-6	2.01E-5	1.25E-6	5.36E-6	3.33E-8	-1.30E-5	1.37E-5
NHWD	kg	1.22E-1	1.40E-1	3.07E-2	2.94E-1	3.04E-2	1.61E-1	1.21E-1	-4.45E-2	5.61E-1
RWD	kg	4.51E-5	1.54E-5	1.61E-6	6.21E-5	3.33E-6	1.25E-5	1.80E-7	-2.60E-5	5.21E-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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