

Environmental Profile

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

Ecochain v3.5.80



Product: 3075853 - EK PP-RCT Tee GY 125
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	0.3	0.03	0.07	0.4	0.01	0.12	0	-0.17	0.36
ADPE	kg Sb-eq	5.70E-5	5.40E-6	2.59E-5	8.83E-5	1.19E-6	5.82E-6	1.31E-8	-1.49E-5	8.05E-5
ADPF	kg Sb-eq	6.06E-2	1.52E-3	1.89E-3	6.41E-2	3.35E-4	2.23E-3	1.83E-5	-3.32E-2	3.34E-2
GWP	kg CO2-eq	3.50E+0	2.07E-1	3.41E-1	4.05E+0	4.56E-2	1.39E+0	1.85E-2	-2.14E+0	3.37E+0
ODP	kg CFC-11-eq	8.21E-8	3.84E-8	6.04E-7	7.25E-7	8.46E-9	2.97E-8	4.39E-10	-8.48E-8	6.79E-7
POCP	kg ethene-eq	2.90E-3	1.24E-4	2.50E-4	3.27E-3	2.74E-5	2.23E-4	4.22E-6	-1.42E-3	2.10E-3
AP	kg SO2-eq	1.11E-2	8.92E-4	2.41E-3	1.44E-2	1.96E-4	1.14E-3	9.67E-6	-5.39E-3	1.03E-2
EP	kg PO4 3--eq	1.07E-3	1.78E-4	3.07E-4	1.56E-3	3.92E-5	2.02E-4	4.22E-6	-5.65E-4	1.24E-3
HTP	kg 1,4-DB-eq	5.63E-1	8.86E-2	4.17E-1	1.07E+0	1.95E-2	4.52E-1	1.45E-3	-2.74E-1	1.27E+0
FAETP	kg 1,4-DB-eq	1.62E-2	2.60E-3	1.51E-2	3.39E-2	5.72E-4	9.99E-3	1.57E-3	-7.78E-3	3.83E-2
MAETP	kg 1,4-DB-eq	3.72E+1	9.27E+0	4.26E+1	8.91E+1	2.04E+0	2.29E+1	1.57E+0	-1.68E+1	9.87E+1
TETP	kg 1,4-DB-eq	2.59E-3	3.14E-4	2.24E-2	2.53E-2	6.92E-5	1.39E-3	2.36E-6	-1.96E-3	2.48E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	3.67E+0	2.09E-1	4.05E-1	4.29E+0	4.61E-2	1.44E+0	2.17E-2	-2.12E+0	3.67E+0
GWP-f	kg CO2 eq	3.66E+0	2.09E-1	3.27E-1	4.19E+0	4.60E-2	1.39E+0	2.17E-2	-2.22E+0	3.44E+0
GWP-b	kg CO2 eq	1.60E-2	1.27E-4	7.24E-2	8.86E-2	2.79E-5	4.40E-2	1.89E-5	9.75E-2	2.30E-1
GWP-luluc	kg CO2 eq	1.56E-3	7.39E-5	5.30E-3	6.93E-3	1.63E-5	2.61E-4	3.73E-7	-1.15E-3	6.07E-3
ODP	kg CFC11 eq	7.92E-8	4.81E-8	3.36E-7	4.64E-7	1.06E-8	3.51E-8	5.44E-10	-8.91E-8	4.21E-7
AP	mol H+ eq	1.34E-2	1.19E-3	3.04E-3	1.76E-2	2.62E-4	1.47E-3	1.30E-5	-6.51E-3	1.28E-2
EP-fw	kg P eq	6.00E-5	1.72E-6	1.10E-5	7.27E-5	3.79E-7	7.57E-6	1.71E-8	-3.26E-5	4.80E-5
EP-m	kg N eq	2.30E-3	4.26E-4	5.59E-4	3.28E-3	9.38E-5	4.32E-4	8.42E-6	-1.18E-3	2.64E-3
EP-T	mol N eq	2.58E-2	4.69E-3	6.97E-3	3.75E-2	1.03E-3	4.75E-3	5.27E-5	-1.31E-2	3.02E-2
POCP	kg NMVOC eq	1.14E-2	1.34E-3	1.61E-3	1.43E-2	2.95E-4	1.50E-3	1.98E-5	-5.76E-3	1.04E-2
ADP-mm	kg Sb eq	5.70E-5	5.40E-6	2.59E-5	8.83E-5	1.19E-6	5.82E-6	1.31E-8	-1.49E-5	8.05E-5
ADP-f	MJ	1.27E+2	3.21E+0	8.54E+1	2.16E+2	7.06E-1	4.59E+0	3.97E-2	-6.88E+1	1.52E+2
WDP	m3 depriv.	2.55E+0	9.84E-3	1.47E+0	4.03E+0	2.17E-3	8.88E-2	2.15E-4	-1.32E+0	2.80E+0
PM	disease inc.	1.20E-7	1.89E-8	2.48E-8	1.64E-7	4.15E-9	2.41E-8	2.73E-10	-6.01E-8	1.32E-7
IR	kBq U-235 eq	6.97E-2	1.40E-2	1.00E+0	1.08E+0	3.09E-3	1.40E-2	1.84E-4	-3.79E-2	1.06E+0
ETP-fw	CTUe	3.29E+1	2.60E+0	2.85E+1	6.40E+1	5.74E-1	5.26E+0	3.33E-2	-1.63E+1	5.35E+1
HTP-c	CTUh	8.99E-10	9.27E-11	6.08E-10	1.60E-9	2.04E-11	6.39E-10	9.82E-13	-4.18E-10	1.84E-9
HTP-nc	CTUh	2.49E-8	3.10E-9	1.94E-8	4.74E-8	6.84E-10	7.77E-9	2.15E-11	-1.22E-8	4.37E-8
SQP	Pt	8.99E+0	2.74E+0	2.34E+1	3.51E+1	6.04E-1	3.64E+0	1.02E-1	-2.06E+1	1.88E+1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.73E+0	4.60E-2	1.21E+1	1.49E+1	1.01E-2	2.24E-1	1.53E-3	-4.25E+0	1.08E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.73E+0	4.60E-2	1.21E+1	1.49E+1	1.01E-2	2.24E-1	1.53E-3	-4.25E+0	1.08E+1
PENRE	MJ	1.36E+2	3.40E+0	8.56E+1	2.25E+2	7.50E-1	4.89E+0	4.22E-2	-7.41E+1	1.57E+2
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.36E+2	3.40E+0	8.56E+1	2.25E+2	7.50E-1	4.89E+0	4.22E-2	-7.41E+1	1.57E+2
PET	MJ	1.39E+2	3.45E+0	9.77E+1	2.40E+2	7.60E-1	5.11E+0	4.37E-2	-7.83E+1	1.68E+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	3.95E-2	3.63E-4	4.74E-2	8.73E-2	7.99E-5	2.63E-3	4.89E-5	-2.14E-2	6.87E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.81E-5	8.20E-6	1.46E-6	2.77E-5	1.81E-6	7.57E-6	4.80E-8	-1.73E-5	1.98E-5
NHWD	kg	1.65E-1	1.99E-1	4.19E-2	4.05E-1	4.38E-2	2.26E-1	1.75E-1	-6.03E-2	7.90E-1
RWD	kg	6.12E-5	2.18E-5	2.19E-6	8.52E-5	4.80E-6	1.78E-5	2.59E-7	-3.45E-5	7.35E-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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