

Environmental Profile

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

Ecochain v3.5.80



Product: 3079554 - EK PP-RCT Tee Reduced GY 90x75x90
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	0.1	0.01	0.02	0.13	0	0.04	0	-0.06	0.12
ADPE	kg Sb-eq	1.90E-5	1.89E-6	8.03E-6	2.89E-5	4.13E-7	1.97E-6	4.56E-9	-5.00E-6	2.63E-5
ADPF	kg Sb-eq	2.07E-2	5.31E-4	5.96E-4	2.18E-2	1.16E-4	7.62E-4	6.36E-6	-1.14E-2	1.13E-2
GWP	kg CO2-eq	1.18E+0	7.24E-2	1.08E-1	1.36E+0	1.58E-2	4.70E-1	6.42E-3	-7.24E-1	1.13E+0
ODP	kg CFC-11-eq	2.59E-8	1.34E-8	1.87E-7	2.26E-7	2.93E-9	1.00E-8	1.52E-10	-2.72E-8	2.12E-7
POCP	kg ethene-eq	9.83E-4	4.34E-5	7.82E-5	1.10E-3	9.50E-6	7.55E-5	1.46E-6	-4.83E-4	7.08E-4
AP	kg SO2-eq	3.72E-3	3.11E-4	7.48E-4	4.78E-3	6.81E-5	3.85E-4	3.35E-6	-1.78E-3	3.45E-3
EP	kg PO4 3--eq	3.44E-4	6.22E-5	9.59E-5	5.02E-4	1.36E-5	6.79E-5	1.46E-6	-1.72E-4	4.13E-4
HTP	kg 1,4-DB-eq	1.85E-1	3.10E-2	1.31E-1	3.47E-1	6.77E-3	1.55E-1	5.02E-4	-8.86E-2	4.20E-1
FAETP	kg 1,4-DB-eq	4.78E-3	9.07E-4	4.74E-3	1.04E-2	1.98E-4	3.37E-3	5.44E-4	-2.06E-3	1.25E-2
MAETP	kg 1,4-DB-eq	1.22E+1	3.24E+0	1.33E+1	2.87E+1	7.08E-1	7.62E+0	5.43E-1	-5.41E+0	3.21E+1
TETP	kg 1,4-DB-eq	7.93E-4	1.10E-4	6.93E-3	7.83E-3	2.40E-5	4.78E-4	8.20E-7	-4.63E-4	7.87E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.24E+0	7.30E-2	1.28E-1	1.44E+0	1.60E-2	4.78E-1	7.52E-3	-7.39E-1	1.20E+0
GWP-f	kg CO2 eq	1.24E+0	7.30E-2	1.03E-1	1.41E+0	1.60E-2	4.72E-1	7.52E-3	-7.50E-1	1.16E+0
GWP-b	kg CO2 eq	5.48E-3	4.43E-5	2.29E-2	2.84E-2	9.69E-6	5.51E-3	6.53E-6	1.15E-2	4.54E-2
GWP-luluc	kg CO2 eq	4.06E-4	2.58E-5	1.64E-3	2.07E-3	5.65E-6	9.00E-5	1.30E-7	-2.41E-4	1.93E-3
ODP	kg CFC11 eq	2.46E-8	1.68E-8	1.04E-7	1.46E-7	3.68E-9	1.18E-8	1.89E-10	-2.87E-8	1.33E-7
AP	mol H+ eq	4.48E-3	4.16E-4	9.46E-4	5.84E-3	9.09E-5	4.97E-4	4.51E-6	-2.15E-3	4.28E-3
EP-fw	kg P eq	1.91E-5	6.00E-7	3.43E-6	2.31E-5	1.31E-7	2.60E-6	5.92E-9	-9.37E-6	1.64E-5
EP-m	kg N eq	7.49E-4	1.49E-4	1.75E-4	1.07E-3	3.25E-5	1.45E-4	2.92E-6	-3.83E-4	8.70E-4
EP-T	mol N eq	8.47E-3	1.64E-3	2.17E-3	1.23E-2	3.58E-4	1.60E-3	1.83E-5	-4.25E-3	1.00E-2
POCP	kg NMVOC eq	3.82E-3	4.69E-4	5.02E-4	4.79E-3	1.02E-4	5.05E-4	6.86E-6	-1.92E-3	3.48E-3
ADP-mm	kg Sb eq	1.90E-5	1.89E-6	8.03E-6	2.89E-5	4.13E-7	1.97E-6	4.56E-9	-5.00E-6	2.63E-5
ADP-f	MJ	4.34E+1	1.12E+0	2.64E+1	7.10E+1	2.45E-1	1.57E+0	1.38E-2	-2.35E+1	4.93E+1
WDP	m3 depriv.	8.67E-1	3.44E-3	4.58E-1	1.33E+0	7.51E-4	3.06E-2	7.55E-5	-4.25E-1	9.36E-1
PM	disease inc.	3.94E-8	6.59E-9	7.77E-9	5.38E-8	1.44E-9	8.17E-9	9.48E-11	-1.87E-8	4.48E-8
IR	kBq U-235 eq	2.29E-2	4.90E-3	3.10E-1	3.37E-1	1.07E-3	4.74E-3	6.38E-5	-1.17E-2	3.32E-1
ETP-fw	CTUe	8.50E+0	9.10E-1	8.84E+0	1.82E+1	1.99E-1	1.78E+0	1.15E-2	-3.95E+0	1.63E+1
HTP-c	CTUh	2.95E-10	3.24E-11	1.90E-10	5.18E-10	7.08E-12	2.18E-10	3.41E-13	-1.32E-10	6.11E-10
HTP-nc	CTUh	8.21E-9	1.08E-9	6.03E-9	1.53E-8	2.37E-10	2.65E-9	7.45E-12	-3.77E-9	1.44E-8
SQP	Pt	2.15E+0	9.58E-1	7.24E+0	1.03E+1	2.09E-1	1.25E+0	3.53E-2	-3.15E+0	8.69E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	7.47E-1	1.61E-2	3.74E+0	4.50E+0	3.51E-3	7.71E-2	5.30E-4	-7.47E-1	3.83E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	7.47E-1	1.61E-2	3.74E+0	4.50E+0	3.51E-3	7.71E-2	5.30E-4	-7.47E-1	3.83E+0
PENRE	MJ	4.66E+1	1.19E+0	2.65E+1	7.43E+1	2.60E-1	1.67E+0	1.46E-2	-2.54E+1	5.09E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	4.66E+1	1.19E+0	2.65E+1	7.43E+1	2.60E-1	1.67E+0	1.46E-2	-2.54E+1	5.09E+1
PET	MJ	4.74E+1	1.21E+0	3.02E+1	7.88E+1	2.63E-1	1.75E+0	1.52E-2	-2.61E+1	5.47E+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	1.32E-2	1.27E-4	1.48E-2	2.81E-2	2.77E-5	9.03E-4	1.70E-5	-6.58E-3	2.25E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	5.71E-6	2.86E-6	4.88E-7	9.06E-6	6.26E-7	2.57E-6	1.67E-8	-5.61E-6	6.67E-6
NHWD	kg	5.17E-2	6.94E-2	1.40E-2	1.35E-1	1.52E-2	7.72E-2	6.07E-2	-1.91E-2	2.69E-1
RWD	kg	2.00E-5	7.62E-6	7.30E-7	2.83E-5	1.67E-6	6.02E-6	8.99E-8	-1.06E-5	2.55E-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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