

Environmental Profile

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

Ecochain v3.5.80



Product: 3079540 - EK PP-RCT Tee GN 90
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	0.13	0.01	0.03	0.17	0	0.05	0	-0.07	0.15
ADPE	kg Sb-eq	2.41E-5	2.31E-6	9.86E-6	3.63E-5	5.10E-7	2.48E-6	5.63E-9	-6.31E-6	3.30E-5
ADPF	kg Sb-eq	2.64E-2	6.49E-4	7.42E-4	2.78E-2	1.44E-4	9.54E-4	7.86E-6	-1.44E-2	1.45E-2
GWP	kg CO2-eq	1.53E+0	8.84E-2	1.34E-1	1.75E+0	1.96E-2	6.27E-1	7.93E-3	-9.32E-1	1.48E+0
ODP	kg CFC-11-eq	3.54E-8	1.64E-8	2.30E-7	2.81E-7	3.63E-9	1.27E-8	1.88E-10	-3.75E-8	2.60E-7
POCP	kg ethene-eq	1.28E-3	5.31E-5	9.67E-5	1.43E-3	1.17E-5	9.56E-5	1.81E-6	-6.10E-4	9.27E-4
AP	kg SO2-eq	4.85E-3	3.80E-4	9.21E-4	6.15E-3	8.42E-5	4.87E-4	4.15E-6	-2.29E-3	4.44E-3
EP	kg PO4 3--eq	4.65E-4	7.60E-5	1.18E-4	6.59E-4	1.68E-5	8.65E-5	1.81E-6	-2.34E-4	5.31E-4
HTP	kg 1,4-DB-eq	2.47E-1	3.78E-2	1.63E-1	4.47E-1	8.37E-3	1.94E-1	6.21E-4	-1.16E-1	5.34E-1
FAETP	kg 1,4-DB-eq	6.85E-3	1.11E-3	5.87E-3	1.38E-2	2.45E-4	4.45E-3	6.72E-4	-3.07E-3	1.61E-2
MAETP	kg 1,4-DB-eq	1.65E+1	3.96E+0	1.64E+1	3.68E+1	8.75E-1	1.01E+1	6.71E-1	-7.08E+0	4.14E+1
TETP	kg 1,4-DB-eq	1.11E-3	1.34E-4	8.50E-3	9.74E-3	2.96E-5	5.94E-4	1.01E-6	-7.48E-4	9.62E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.60E+0	8.92E-2	1.59E-1	1.85E+0	1.97E-2	6.45E-1	9.29E-3	-9.34E-1	1.59E+0
GWP-f	kg CO2 eq	1.60E+0	8.91E-2	1.28E-1	1.81E+0	1.97E-2	6.30E-1	9.29E-3	-9.65E-1	1.51E+0
GWP-b	kg CO2 eq	5.69E-3	5.41E-5	2.86E-2	3.43E-2	1.20E-5	1.45E-2	8.08E-6	3.18E-2	8.07E-2
GWP-luluc	kg CO2 eq	6.43E-4	3.15E-5	2.01E-3	2.69E-3	6.98E-6	1.12E-4	1.60E-7	-4.23E-4	2.38E-3
ODP	kg CFC11 eq	3.40E-8	2.05E-8	1.28E-7	1.83E-7	4.54E-9	1.50E-8	2.33E-10	-3.96E-8	1.63E-7
AP	mol H+ eq	5.86E-3	5.08E-4	1.16E-3	7.53E-3	1.12E-4	6.30E-4	5.57E-6	-2.76E-3	5.51E-3
EP-fw	kg P eq	2.63E-5	7.33E-7	4.23E-6	3.13E-5	1.62E-7	3.24E-6	7.32E-9	-1.32E-5	2.15E-5
EP-m	kg N eq	9.99E-4	1.82E-4	2.16E-4	1.40E-3	4.02E-5	1.86E-4	3.61E-6	-5.00E-4	1.13E-3
EP-T	mol N eq	1.12E-2	2.00E-3	2.67E-3	1.59E-2	4.43E-4	2.04E-3	2.26E-5	-5.55E-3	1.29E-2
POCP	kg NMVOC eq	4.99E-3	5.72E-4	6.19E-4	6.18E-3	1.27E-4	6.43E-4	8.48E-6	-2.46E-3	4.50E-3
ADP-mm	kg Sb eq	2.41E-5	2.31E-6	9.86E-6	3.63E-5	5.10E-7	2.48E-6	5.63E-9	-6.31E-6	3.30E-5
ADP-f	MJ	5.54E+1	1.37E+0	3.24E+1	8.91E+1	3.03E-1	1.96E+0	1.70E-2	-2.97E+1	6.17E+1
WDP	m3 depriv.	1.12E+0	4.20E-3	5.65E-1	1.69E+0	9.29E-4	3.81E-2	9.33E-5	-5.53E-1	1.17E+0
PM	disease inc.	5.20E-8	8.05E-9	9.61E-9	6.97E-8	1.78E-9	1.03E-8	1.17E-10	-2.49E-8	5.70E-8
IR	kBq U-235 eq	3.05E-2	5.98E-3	3.80E-1	4.16E-1	1.32E-3	5.96E-3	7.88E-5	-1.57E-2	4.08E-1
ETP-fw	CTUe	1.34E+1	1.11E+0	1.09E+1	2.54E+1	2.46E-1	2.25E+0	1.43E-2	-6.26E+0	2.16E+1
HTP-c	CTUh	3.89E-10	3.95E-11	2.35E-10	6.63E-10	8.75E-12	2.77E-10	4.22E-13	-1.75E-10	7.75E-10
HTP-nc	CTUh	1.08E-8	1.32E-9	7.42E-9	1.96E-8	2.93E-10	3.35E-9	9.21E-12	-5.04E-9	1.82E-8
SQP	Pt	3.59E+0	1.17E+0	8.88E+0	1.36E+1	2.59E-1	1.56E+0	4.37E-2	-7.08E+0	8.43E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.13E+0	1.96E-2	4.58E+0	5.73E+0	4.34E-3	9.61E-2	6.55E-4	-1.50E+0	4.33E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.13E+0	1.96E-2	4.58E+0	5.73E+0	4.34E-3	9.61E-2	6.55E-4	-1.50E+0	4.33E+0
PENRE	MJ	5.94E+1	1.45E+0	3.25E+1	9.34E+1	3.21E-1	2.09E+0	1.81E-2	-3.21E+1	6.38E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.94E+1	1.45E+0	3.25E+1	9.34E+1	3.21E-1	2.09E+0	1.81E-2	-3.21E+1	6.38E+1
PET	MJ	6.05E+1	1.47E+0	3.71E+1	9.91E+1	3.26E-1	2.19E+0	1.87E-2	-3.36E+1	6.81E+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	1.75E-2	1.55E-4	1.82E-2	3.58E-2	3.42E-5	1.13E-3	2.10E-5	-8.84E-3	2.82E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.64E-6	3.50E-6	6.30E-7	1.18E-5	7.74E-7	3.24E-6	2.06E-8	-7.71E-6	8.10E-6
NHWD	kg	7.09E-2	8.48E-2	1.80E-2	1.74E-1	1.88E-2	9.84E-2	7.50E-2	-2.52E-2	3.41E-1
RWD	kg	2.66E-5	9.30E-6	9.43E-7	3.69E-5	2.06E-6	7.59E-6	1.11E-7	-1.43E-5	3.23E-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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