

Environmental Profile

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

Ecochain v3.5.80



Product: 3079537 - EK PP-RCT Tee GN 75
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	0.09	0.01	0.02	0.11	0	0.04	0	-0.05	0.1
ADPE	kg Sb-eq	1.55E-5	1.50E-6	6.34E-6	2.34E-5	3.32E-7	1.58E-6	3.66E-9	-3.97E-6	2.13E-5
ADPF	kg Sb-eq	1.75E-2	4.22E-4	4.75E-4	1.84E-2	9.34E-5	6.13E-4	5.11E-6	-9.43E-3	9.63E-3
GWP	kg CO2-eq	1.00E+0	5.75E-2	8.58E-2	1.15E+0	1.27E-2	4.31E-1	5.16E-3	-6.10E-1	9.86E-1
ODP	kg CFC-11-eq	2.14E-8	1.07E-8	1.48E-7	1.80E-7	2.36E-9	8.05E-9	1.22E-10	-2.42E-8	1.66E-7
POCP	kg ethene-eq	8.53E-4	3.45E-5	6.21E-5	9.50E-4	7.63E-6	6.10E-5	1.17E-6	-3.90E-4	6.29E-4
AP	kg SO2-eq	3.18E-3	2.47E-4	5.92E-4	4.02E-3	5.47E-5	3.12E-4	2.70E-6	-1.42E-3	2.98E-3
EP	kg PO4 3--eq	2.91E-4	4.94E-5	7.60E-5	4.16E-4	1.09E-5	5.53E-5	1.17E-6	-1.31E-4	3.53E-4
HTP	kg 1,4-DB-eq	1.61E-1	2.46E-2	1.04E-1	2.90E-1	5.44E-3	1.26E-1	4.04E-4	-7.03E-2	3.51E-1
FAETP	kg 1,4-DB-eq	3.80E-3	7.20E-4	3.77E-3	8.29E-3	1.59E-4	3.00E-3	4.37E-4	-1.38E-3	1.05E-2
MAETP	kg 1,4-DB-eq	1.08E+1	2.57E+0	1.05E+1	2.38E+1	5.69E-1	6.60E+0	4.36E-1	-4.25E+0	2.72E+1
TETP	kg 1,4-DB-eq	6.69E-4	8.71E-5	5.46E-3	6.22E-3	1.93E-5	3.85E-4	6.59E-7	-2.80E-4	6.34E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.05E+0	5.80E-2	1.02E-1	1.21E+0	1.28E-2	4.33E-1	6.04E-3	-6.33E-1	1.03E+0
GWP-f	kg CO2 eq	1.05E+0	5.79E-2	8.20E-2	1.19E+0	1.28E-2	4.33E-1	6.04E-3	-6.32E-1	1.01E+0
GWP-b	kg CO2 eq	2.63E-3	3.52E-5	1.83E-2	2.10E-2	7.78E-6	-5.35E-5	5.25E-6	-1.05E-3	1.99E-2
GWP-luluc	kg CO2 eq	3.19E-4	2.05E-5	1.29E-3	1.63E-3	4.54E-6	7.25E-5	1.04E-7	-1.24E-4	1.59E-3
ODP	kg CFC11 eq	2.03E-8	1.34E-8	8.23E-8	1.16E-7	2.95E-9	9.52E-9	1.52E-10	-2.58E-8	1.03E-7
AP	mol H+ eq	3.83E-3	3.30E-4	7.48E-4	4.91E-3	7.30E-5	4.03E-4	3.62E-6	-1.71E-3	3.68E-3
EP-fw	kg P eq	1.67E-5	4.77E-7	2.72E-6	1.99E-5	1.05E-7	2.09E-6	4.75E-9	-6.72E-6	1.54E-5
EP-m	kg N eq	6.37E-4	1.18E-4	1.38E-4	8.93E-4	2.61E-5	1.18E-4	2.34E-6	-3.05E-4	7.35E-4
EP-T	mol N eq	7.21E-3	1.30E-3	1.72E-3	1.02E-2	2.88E-4	1.30E-3	1.47E-5	-3.38E-3	8.45E-3
POCP	kg NMVOC eq	3.29E-3	3.72E-4	3.98E-4	4.06E-3	8.23E-5	4.11E-4	5.51E-6	-1.55E-3	3.01E-3
ADP-mm	kg Sb eq	1.55E-5	1.50E-6	6.34E-6	2.34E-5	3.32E-7	1.58E-6	3.66E-9	-3.97E-6	2.13E-5
ADP-f	MJ	3.65E+1	8.89E-1	2.08E+1	5.83E+1	1.97E-1	1.26E+0	1.11E-2	-1.94E+1	4.03E+1
WDP	m3 depriv.	7.41E-1	2.73E-3	3.63E-1	1.11E+0	6.04E-4	2.47E-2	6.03E-5	-3.29E-1	8.03E-1
PM	disease inc.	3.32E-8	5.23E-9	6.17E-9	4.46E-8	1.16E-9	6.59E-9	7.61E-11	-1.42E-8	3.82E-8
IR	kBq U-235 eq	1.97E-2	3.89E-3	2.44E-1	2.68E-1	8.60E-4	3.81E-3	5.13E-5	-8.99E-3	2.63E-1
ETP-fw	CTUe	6.37E+0	7.22E-1	6.98E+0	1.41E+1	1.60E-1	1.43E+0	9.27E-3	-2.45E+0	1.32E+1
HTP-c	CTUh	2.50E-10	2.57E-11	1.51E-10	4.27E-10	5.69E-12	1.80E-10	2.74E-13	-1.02E-10	5.11E-10
HTP-nc	CTUh	6.96E-9	8.61E-10	4.76E-9	1.26E-8	1.90E-10	2.17E-9	5.99E-12	-2.87E-9	1.21E-8
SQP	Pt	1.58E+0	7.61E-1	5.71E+0	8.05E+0	1.68E-1	1.01E+0	2.84E-2	-7.10E-1	8.54E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	5.86E-1	1.28E-2	2.95E+0	3.54E+0	2.82E-3	6.20E-2	4.26E-4	-2.70E-1	3.34E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	5.86E-1	1.28E-2	2.95E+0	3.54E+0	2.82E-3	6.20E-2	4.26E-4	-2.70E-1	3.34E+0
PENRE	MJ	3.92E+1	9.44E-1	2.09E+1	6.10E+1	2.09E-1	1.34E+0	1.18E-2	-2.09E+1	4.17E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.92E+1	9.44E-1	2.09E+1	6.10E+1	2.09E-1	1.34E+0	1.18E-2	-2.09E+1	4.17E+1
PET	MJ	3.98E+1	9.57E-1	2.39E+1	6.46E+1	2.12E-1	1.41E+0	1.22E-2	-2.12E+1	4.50E+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	1.16E-2	1.01E-4	1.17E-2	2.34E-2	2.23E-5	7.35E-4	1.36E-5	-4.96E-3	1.92E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	4.69E-6	2.27E-6	4.01E-7	7.36E-6	5.03E-7	2.07E-6	1.34E-8	-5.05E-6	4.90E-6
NHWD	kg	4.45E-2	5.51E-2	1.14E-2	1.11E-1	1.22E-2	6.44E-2	4.88E-2	-1.48E-2	2.22E-1
RWD	kg	1.70E-5	6.05E-6	6.00E-7	2.36E-5	1.34E-6	4.83E-6	7.22E-8	-8.17E-6	2.17E-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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