

Environmental Profile

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

Ecochain v3.5.80



Product: 3079549 - EK PP-RCT Tee Reduced GY 75x50x75
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	0.06	0.01	0.01	0.08	0	0.02	0	-0.03	0.07
ADPE	kg Sb-eq	1.14E-5	1.14E-6	4.74E-6	1.73E-5	2.45E-7	1.18E-6	2.71E-9	-3.01E-6	1.57E-5
ADPF	kg Sb-eq	1.24E-2	3.22E-4	3.54E-4	1.31E-2	6.90E-5	4.55E-4	3.78E-6	-6.80E-3	6.79E-3
GWP	kg CO2-eq	7.12E-1	4.38E-2	6.40E-2	8.20E-1	9.40E-3	2.83E-1	3.81E-3	-4.35E-1	6.81E-1
ODP	kg CFC-11-eq	1.61E-8	8.12E-9	1.10E-7	1.35E-7	1.74E-9	6.02E-9	9.03E-11	-1.68E-8	1.26E-7
POCP	kg ethene-eq	5.90E-4	2.63E-5	4.63E-5	6.63E-4	5.64E-6	4.54E-5	8.68E-7	-2.90E-4	4.25E-4
AP	kg SO2-eq	2.24E-3	1.89E-4	4.42E-4	2.88E-3	4.05E-5	2.31E-4	1.99E-6	-1.08E-3	2.07E-3
EP	kg PO4 3--eq	2.12E-4	3.76E-5	5.68E-5	3.07E-4	8.08E-6	4.09E-5	8.68E-7	-1.08E-4	2.48E-4
HTP	kg 1,4-DB-eq	1.13E-1	1.87E-2	7.77E-2	2.09E-1	4.02E-3	9.24E-2	2.98E-4	-5.43E-2	2.52E-1
FAETP	kg 1,4-DB-eq	3.09E-3	5.49E-4	2.81E-3	6.45E-3	1.18E-4	2.03E-3	3.23E-4	-1.39E-3	7.53E-3
MAETP	kg 1,4-DB-eq	7.48E+0	1.96E+0	7.85E+0	1.73E+1	4.21E-1	4.62E+0	3.22E-1	-3.32E+0	1.93E+1
TETP	kg 1,4-DB-eq	4.98E-4	6.64E-5	4.09E-3	4.65E-3	1.42E-5	2.85E-4	4.87E-7	-3.30E-4	4.62E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	7.46E-1	4.42E-2	7.57E-2	8.66E-1	9.48E-3	2.90E-1	4.47E-3	-4.38E-1	7.32E-1
GWP-f	kg CO2 eq	7.43E-1	4.42E-2	6.12E-2	8.48E-1	9.48E-3	2.84E-1	4.47E-3	-4.51E-1	6.96E-1
GWP-b	kg CO2 eq	3.24E-3	2.68E-5	1.36E-2	1.69E-2	5.75E-6	5.77E-3	3.88E-6	1.25E-2	3.52E-2
GWP-luluc	kg CO2 eq	2.77E-4	1.56E-5	9.69E-4	1.26E-3	3.35E-6	5.36E-5	7.71E-8	-1.83E-4	1.13E-3
ODP	kg CFC11 eq	1.55E-8	1.02E-8	6.16E-8	8.72E-8	2.18E-9	7.13E-9	1.12E-10	-1.76E-8	7.90E-8
AP	mol H+ eq	2.71E-3	2.52E-4	5.59E-4	3.52E-3	5.40E-5	2.98E-4	2.68E-6	-1.30E-3	2.57E-3
EP-fw	kg P eq	1.18E-5	3.63E-7	2.03E-6	1.42E-5	7.80E-8	1.55E-6	3.52E-9	-6.07E-6	9.77E-6
EP-m	kg N eq	4.58E-4	9.00E-5	1.03E-4	6.52E-4	1.93E-5	8.74E-5	1.73E-6	-2.34E-4	5.26E-4
EP-T	mol N eq	5.16E-3	9.92E-4	1.28E-3	7.44E-3	2.13E-4	9.62E-4	1.09E-5	-2.60E-3	6.02E-3
POCP	kg NMVOC eq	2.30E-3	2.84E-4	2.97E-4	2.88E-3	6.08E-5	3.04E-4	4.08E-6	-1.16E-3	2.09E-3
ADP-mm	kg Sb eq	1.14E-5	1.14E-6	4.74E-6	1.73E-5	2.45E-7	1.18E-6	2.71E-9	-3.01E-6	1.57E-5
ADP-f	MJ	2.60E+1	6.78E-1	1.56E+1	4.22E+1	1.45E-1	9.37E-1	8.19E-3	-1.41E+1	2.93E+1
WDP	m3 depriv.	5.20E-1	2.08E-3	2.71E-1	7.94E-1	4.46E-4	1.82E-2	4.51E-5	-2.61E-1	5.52E-1
PM	disease inc.	2.40E-8	3.99E-9	4.60E-9	3.26E-8	8.55E-10	4.90E-9	5.63E-11	-1.17E-8	2.68E-8
IR	kBq U-235 eq	1.40E-2	2.96E-3	1.83E-1	2.00E-1	6.36E-4	2.84E-3	3.79E-5	-7.33E-3	1.96E-1
ETP-fw	CTUe	5.82E+0	5.50E-1	5.22E+0	1.16E+1	1.18E-1	1.07E+0	6.85E-3	-2.78E+0	1.00E+1
HTP-c	CTUh	1.80E-10	1.96E-11	1.12E-10	3.12E-10	4.20E-12	1.31E-10	2.03E-13	-8.16E-11	3.65E-10
HTP-nc	CTUh	5.00E-9	6.56E-10	3.56E-9	9.22E-9	1.41E-10	1.59E-9	4.43E-12	-2.36E-9	8.59E-9
SQP	Pt	1.52E+0	5.80E-1	4.27E+0	6.38E+0	1.24E-1	7.46E-1	2.10E-2	-2.90E+0	4.37E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.96E-1	9.73E-3	2.20E+0	2.71E+0	2.09E-3	4.60E-2	3.15E-4	-6.30E-1	2.13E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.96E-1	9.73E-3	2.20E+0	2.71E+0	2.09E-3	4.60E-2	3.15E-4	-6.30E-1	2.13E+0
PENRE	MJ	2.79E+1	7.20E-1	1.56E+1	4.42E+1	1.54E-1	9.99E-1	8.69E-3	-1.52E+1	3.02E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.79E+1	7.20E-1	1.56E+1	4.42E+1	1.54E-1	9.99E-1	8.69E-3	-1.52E+1	3.02E+1
PET	MJ	2.84E+1	7.29E-1	1.78E+1	4.69E+1	1.57E-1	1.04E+0	9.00E-3	-1.58E+1	3.24E+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	8.01E-3	7.67E-5	8.72E-3	1.68E-2	1.65E-5	5.39E-4	1.01E-5	-4.13E-3	1.33E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	3.53E-6	1.73E-6	2.95E-7	5.55E-6	3.72E-7	1.54E-6	9.90E-9	-3.44E-6	4.03E-6
NHWD	kg	3.20E-2	4.20E-2	8.43E-3	8.25E-2	9.02E-3	4.62E-2	3.60E-2	-1.18E-2	1.62E-1
RWD	kg	1.22E-5	4.61E-6	4.42E-7	1.73E-5	9.89E-7	3.61E-6	5.34E-8	-6.64E-6	1.53E-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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