

Environmental Profile

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

Ecochain v3.5.80



Product: 3082646 - EK PP-RCT Tee Reduced GN 63x40x63
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	0.04	0	0.01	0.05	0	0.02	0	-0.02	0.05
ADPE	kg Sb-eq	7.49E-6	7.33E-7	3.07E-6	1.13E-5	1.57E-7	7.82E-7	1.74E-9	-2.00E-6	1.02E-5
ADPF	kg Sb-eq	8.08E-3	2.06E-4	2.32E-4	8.52E-3	4.43E-5	2.97E-4	2.43E-6	-4.43E-3	4.43E-3
GWP	kg CO2-eq	4.71E-1	2.81E-2	4.18E-2	5.41E-1	6.03E-3	1.86E-1	2.45E-3	-2.87E-1	4.48E-1
ODP	kg CFC-11-eq	1.16E-8	5.21E-9	7.15E-8	8.83E-8	1.12E-9	3.99E-9	5.80E-11	-1.18E-8	8.17E-8
POCP	kg ethene-eq	3.87E-4	1.69E-5	3.02E-5	4.35E-4	3.62E-6	3.00E-5	5.57E-7	-1.91E-4	2.78E-4
AP	kg SO2-eq	1.49E-3	1.21E-4	2.87E-4	1.90E-3	2.60E-5	1.53E-4	1.28E-6	-7.35E-4	1.34E-3
EP	kg PO4 3--eq	1.49E-4	2.42E-5	3.69E-5	2.10E-4	5.18E-6	2.71E-5	5.57E-7	-8.10E-5	1.62E-4
HTP	kg 1,4-DB-eq	7.65E-2	1.20E-2	5.07E-2	1.39E-1	2.58E-3	6.02E-2	1.91E-4	-3.80E-2	1.64E-1
FAETP	kg 1,4-DB-eq	2.39E-3	3.52E-4	1.83E-3	4.58E-3	7.56E-5	1.34E-3	2.07E-4	-1.20E-3	5.00E-3
MAETP	kg 1,4-DB-eq	5.14E+0	1.26E+0	5.10E+0	1.15E+1	2.70E-1	3.10E+0	2.07E-1	-2.34E+0	1.27E+1
TETP	kg 1,4-DB-eq	3.66E-4	4.26E-5	2.65E-3	3.05E-3	9.14E-6	1.84E-4	3.13E-7	-3.16E-4	2.93E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	4.93E-1	2.84E-2	4.95E-2	5.71E-1	6.09E-3	1.95E-1	2.87E-3	-2.79E-1	4.96E-1
GWP-f	kg CO2 eq	4.91E-1	2.83E-2	4.00E-2	5.59E-1	6.08E-3	1.87E-1	2.87E-3	-2.97E-1	4.57E-1
GWP-b	kg CO2 eq	2.13E-3	1.72E-5	8.93E-3	1.11E-2	3.69E-6	8.39E-3	2.49E-6	1.88E-2	3.83E-2
GWP-luluc	kg CO2 eq	2.41E-4	1.00E-5	6.27E-4	8.78E-4	2.15E-6	3.47E-5	4.94E-8	-1.92E-4	7.22E-4
ODP	kg CFC11 eq	1.13E-8	6.53E-9	3.99E-8	5.77E-8	1.40E-9	4.73E-9	7.19E-11	-1.23E-8	5.16E-8
AP	mol H+ eq	1.81E-3	1.61E-4	3.63E-4	2.33E-3	3.46E-5	1.97E-4	1.72E-6	-8.89E-4	1.68E-3
EP-fw	kg P eq	8.37E-6	2.33E-7	1.32E-6	9.92E-6	5.00E-8	1.01E-6	2.26E-9	-4.83E-6	6.16E-6
EP-m	kg N eq	3.16E-4	5.77E-5	6.73E-5	4.41E-4	1.24E-5	5.83E-5	1.11E-6	-1.63E-4	3.50E-4
EP-T	mol N eq	3.52E-3	6.36E-4	8.32E-4	4.99E-3	1.37E-4	6.41E-4	6.97E-6	-1.81E-3	3.96E-3
POCP	kg NMVOC eq	1.53E-3	1.82E-4	1.93E-4	1.91E-3	3.90E-5	2.02E-4	2.62E-6	-7.81E-4	1.37E-3
ADP-mm	kg Sb eq	7.49E-6	7.33E-7	3.07E-6	1.13E-5	1.57E-7	7.82E-7	1.74E-9	-2.00E-6	1.02E-5
ADP-f	MJ	1.69E+1	4.35E-1	1.01E+1	2.75E+1	9.33E-2	6.12E-1	5.25E-3	-9.16E+0	1.90E+1
WDP	m3 depriv.	3.41E-1	1.33E-3	1.76E-1	5.18E-1	2.86E-4	1.18E-2	2.88E-5	-1.83E-1	3.47E-1
PM	disease inc.	1.64E-8	2.56E-9	3.00E-9	2.19E-8	5.49E-10	3.23E-9	3.61E-11	-8.50E-9	1.72E-8
IR	kBq U-235 eq	9.54E-3	1.90E-3	1.18E-1	1.30E-1	4.08E-4	1.87E-3	2.43E-5	-5.38E-3	1.27E-1
ETP-fw	CTUe	5.12E+0	3.53E-1	3.38E+0	8.85E+0	7.58E-2	7.06E-1	4.40E-3	-2.60E+0	7.04E+0
HTP-c	CTUh	1.22E-10	1.26E-11	7.32E-11	2.07E-10	2.70E-12	8.58E-11	1.30E-13	-5.88E-11	2.37E-10
HTP-nc	CTUh	3.39E-9	4.21E-10	2.31E-9	6.12E-9	9.04E-11	1.04E-9	2.84E-12	-1.73E-9	5.53E-9
SQP	Pt	1.43E+0	3.72E-1	2.77E+0	4.56E+0	7.99E-2	4.85E-1	1.35E-2	-3.78E+0	1.36E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	4.12E-1	6.24E-3	1.43E+0	1.85E+0	1.34E-3	2.98E-2	2.02E-4	-7.53E-1	1.12E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	4.12E-1	6.24E-3	1.43E+0	1.85E+0	1.34E-3	2.98E-2	2.02E-4	-7.53E-1	1.12E+0
PENRE	MJ	1.82E+1	4.62E-1	1.01E+1	2.88E+1	9.91E-2	6.52E-1	5.57E-3	-9.87E+0	1.96E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.82E+1	4.62E-1	1.01E+1	2.88E+1	9.91E-2	6.52E-1	5.57E-3	-9.87E+0	1.96E+1
PET	MJ	1.86E+1	4.68E-1	1.16E+1	3.06E+1	1.00E-1	6.82E-1	5.78E-3	-1.06E+1	2.08E+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	5.35E-3	4.92E-5	5.66E-3	1.11E-2	1.06E-5	3.51E-4	6.47E-6	-3.05E-3	8.37E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.48E-6	1.11E-6	1.99E-7	3.79E-6	2.39E-7	1.02E-6	6.35E-9	-2.39E-6	2.66E-6
NHWD	kg	2.27E-2	2.70E-2	5.67E-3	5.53E-2	5.79E-3	3.03E-2	2.31E-2	-8.44E-3	1.06E-1
RWD	kg	8.41E-6	2.96E-6	2.97E-7	1.17E-5	6.35E-7	2.38E-6	3.43E-8	-4.91E-6	9.80E-6
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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