

Environmental Profile

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

Ecochain v3.5.80



Product: 3085132 - EK PP-RCT Tee Reduced GN 40x32x40
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	0.01	0	0	0.02	0	0	0	-0.01	0.01
ADPE	kg Sb-eq	2.29E-6	2.24E-7	9.41E-7	3.45E-6	4.36E-8	2.14E-7	4.84E-10	-5.47E-7	3.16E-6
ADPF	kg Sb-eq	2.23E-3	6.31E-5	6.89E-5	2.37E-3	1.23E-5	8.19E-5	6.73E-7	-1.23E-3	1.23E-3
GWP	kg CO2-eq	1.31E-1	8.60E-3	1.25E-2	1.52E-1	1.67E-3	5.26E-2	6.77E-4	-7.95E-2	1.27E-1
ODP	kg CFC-11-eq	3.24E-9	1.59E-9	2.19E-8	2.68E-8	3.10E-10	1.09E-9	1.61E-11	-3.22E-9	2.50E-8
POCP	kg ethene-eq	1.08E-4	5.16E-6	9.10E-6	1.22E-4	1.00E-6	8.23E-6	1.54E-7	-5.25E-5	7.91E-5
AP	kg SO2-eq	4.19E-4	3.70E-5	8.75E-5	5.44E-4	7.19E-6	4.19E-5	3.55E-7	-1.99E-4	3.94E-4
EP	kg PO4 3--eq	4.13E-5	7.39E-6	1.12E-5	5.99E-5	1.44E-6	7.46E-6	1.54E-7	-2.11E-5	4.78E-5
HTP	kg 1,4-DB-eq	2.16E-2	3.68E-3	1.52E-2	4.05E-2	7.15E-4	1.66E-2	5.29E-5	-1.02E-2	4.77E-2
FAETP	kg 1,4-DB-eq	6.61E-4	1.08E-4	5.51E-4	1.32E-3	2.09E-5	3.75E-4	5.70E-5	-2.96E-4	1.48E-3
MAETP	kg 1,4-DB-eq	1.48E+0	3.85E-1	1.55E+0	3.41E+0	7.48E-2	8.60E-1	5.69E-2	-6.25E-1	3.78E+0
TETP	kg 1,4-DB-eq	1.00E-4	1.30E-5	8.12E-4	9.26E-4	2.53E-6	5.09E-5	8.71E-8	-7.53E-5	9.04E-4
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.37E-1	8.67E-3	1.48E-2	1.60E-1	1.69E-3	5.46E-2	7.94E-4	-7.84E-2	1.39E-1
GWP-f	kg CO2 eq	1.36E-1	8.66E-3	1.19E-2	1.57E-1	1.68E-3	5.28E-2	7.94E-4	-8.23E-2	1.30E-1
GWP-b	kg CO2 eq	5.37E-4	5.26E-6	2.65E-3	3.19E-3	1.02E-6	1.77E-3	6.89E-7	3.93E-3	8.88E-3
GWP-luluc	kg CO2 eq	6.16E-5	3.07E-6	1.93E-4	2.57E-4	5.96E-7	9.59E-6	1.39E-8	-4.45E-5	2.23E-4
ODP	kg CFC11 eq	3.15E-9	2.00E-9	1.22E-8	1.74E-8	3.88E-10	1.30E-9	1.99E-11	-3.39E-9	1.57E-8
AP	mol H+ eq	5.07E-4	4.94E-5	1.11E-4	6.67E-4	9.60E-6	5.42E-5	4.77E-7	-2.41E-4	4.91E-4
EP-fw	kg P eq	2.32E-6	7.13E-8	4.00E-7	2.79E-6	1.39E-8	2.78E-7	6.31E-10	-1.23E-6	1.85E-6
EP-m	kg N eq	8.70E-5	1.77E-5	2.03E-5	1.25E-4	3.43E-6	1.60E-5	3.07E-7	-4.38E-5	1.01E-4
EP-T	mol N eq	9.80E-4	1.95E-4	2.54E-4	1.43E-3	3.78E-5	1.76E-4	1.93E-6	-4.87E-4	1.16E-3
POCP	kg NMVOC eq	4.26E-4	5.56E-5	5.85E-5	5.40E-4	1.08E-5	5.54E-5	7.25E-7	-2.13E-4	3.94E-4
ADP-mm	kg Sb eq	2.29E-6	2.24E-7	9.41E-7	3.45E-6	4.36E-8	2.14E-7	4.84E-10	-5.47E-7	3.16E-6
ADP-f	MJ	4.68E+0	1.33E-1	3.10E+0	7.91E+0	2.59E-2	1.69E-1	1.46E-3	-2.54E+0	5.57E+0
WDP	m3 depriv.	9.51E-2	4.08E-4	5.35E-2	1.49E-1	7.94E-5	3.26E-3	8.58E-6	-4.89E-2	1.04E-1
PM	disease inc.	4.54E-9	7.82E-10	9.04E-10	6.23E-9	1.52E-10	8.88E-10	1.00E-11	-2.24E-9	5.04E-9
IR	kBq U-235 eq	2.65E-3	5.81E-4	3.63E-2	3.96E-2	1.13E-4	5.14E-4	6.73E-6	-1.41E-3	3.88E-2
ETP-fw	CTUe	1.31E+0	1.08E-1	1.03E+0	2.45E+0	2.10E-2	1.94E-1	1.22E-3	-6.25E-1	2.05E+0
HTP-c	CTUh	3.47E-11	3.84E-12	2.21E-11	6.07E-11	7.47E-13	2.41E-11	3.65E-14	-1.56E-11	7.00E-11
HTP-nc	CTUh	9.58E-10	1.29E-10	7.05E-10	1.79E-9	2.50E-11	2.88E-10	7.90E-13	-4.54E-10	1.65E-9
SQP	Pt	3.58E-1	1.14E-1	8.49E-1	1.32E+0	2.21E-2	1.34E-1	3.73E-3	-8.20E-1	6.60E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	1.06E-1	1.91E-3	4.38E-1	5.46E-1	3.71E-4	8.23E-3	5.57E-5	-1.67E-1	3.87E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	1.06E-1	1.91E-3	4.38E-1	5.46E-1	3.71E-4	8.23E-3	5.57E-5	-1.67E-1	3.87E-1
PENRE	MJ	5.02E+0	1.41E-1	3.11E+0	8.27E+0	2.75E-2	1.80E-1	1.55E-3	-2.74E+0	5.74E+0
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	5.02E+0	1.41E-1	3.11E+0	8.27E+0	2.75E-2	1.80E-1	1.55E-3	-2.74E+0	5.74E+0
PET	MJ	5.13E+0	1.43E-1	3.55E+0	8.82E+0	2.78E-2	1.88E-1	1.60E-3	-2.90E+0	6.13E+0
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	1.50E-3	1.51E-5	1.72E-3	3.24E-3	2.93E-6	9.69E-5	1.79E-6	-7.99E-4	2.55E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	7.06E-7	3.40E-7	5.44E-8	1.10E-6	6.61E-8	2.80E-7	1.77E-9	-6.58E-7	7.91E-7
NHWD	kg	6.47E-3	8.24E-3	1.56E-3	1.63E-2	1.60E-3	8.40E-3	6.41E-3	-2.24E-3	3.04E-2
RWD	kg	2.32E-6	9.05E-7	8.14E-8	3.31E-6	1.76E-7	6.54E-7	9.49E-9	-1.29E-6	2.86E-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



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777