

Environmental Profile

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

Ecochain v3.5.80



Product: 3084953 - EK PP-RCT Tee Reduced GY 50x32x50
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

This document and supporting material contain confidential and proprietary business information of Wavin - CZ - Kostelec - Verified. These materials may be printed or (photo) copied or otherwise used only with the written consent of Wavin - CZ - Kostelec - Verified.

Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.02	0	0	0.03	0	0.01	0	-0.01	0.03
ADPE	kg Sb-eq	4.05E-6	3.81E-7	1.56E-6	5.99E-6	8.04E-8	4.03E-7	8.89E-10	-1.03E-6	5.44E-6
ADPF	kg Sb-eq	4.29E-3	1.07E-4	1.19E-4	4.51E-3	2.26E-5	1.53E-4	1.24E-6	-2.33E-3	2.37E-3
GWP	kg CO2-eq	2.53E-1	1.46E-2	2.15E-2	2.89E-1	3.08E-3	1.06E-1	1.25E-3	-1.54E-1	2.46E-1
ODP	kg CFC-11-eq	6.41E-9	2.71E-9	3.62E-8	4.53E-8	5.71E-10	2.07E-9	2.96E-11	-6.63E-9	4.14E-8
POCP	kg ethene-eq	2.11E-4	8.78E-6	1.54E-5	2.35E-4	1.85E-6	1.56E-5	2.85E-7	-9.88E-5	1.54E-4
AP	kg SO2-eq	8.13E-4	6.29E-5	1.46E-4	1.02E-3	1.33E-5	7.93E-5	6.54E-7	-3.81E-4	7.34E-4
EP	kg PO4 3--eq	8.20E-5	1.26E-5	1.88E-5	1.13E-4	2.65E-6	1.42E-5	2.84E-7	-4.24E-5	8.81E-5
HTP	kg 1,4-DB-eq	4.26E-2	6.26E-3	2.60E-2	7.48E-2	1.32E-3	3.12E-2	9.77E-5	-1.99E-2	8.74E-2
FAETP	kg 1,4-DB-eq	1.33E-3	1.83E-4	9.36E-4	2.45E-3	3.86E-5	7.45E-4	1.06E-4	-6.28E-4	2.72E-3
MAETP	kg 1,4-DB-eq	2.92E+0	6.55E-1	2.59E+0	6.17E+0	1.38E-1	1.70E+0	1.05E-1	-1.22E+0	6.90E+0
TETP	kg 1,4-DB-eq	2.04E-4	2.22E-5	1.34E-3	1.57E-3	4.67E-6	9.45E-5	1.60E-7	-1.66E-4	1.50E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.65E-1	1.48E-2	2.54E-2	3.05E-1	3.11E-3	1.11E-1	1.46E-3	-1.49E-1	2.71E-1
GWP-f	kg CO2 eq	2.64E-1	1.47E-2	2.05E-2	2.99E-1	3.11E-3	1.06E-1	1.46E-3	-1.59E-1	2.51E-1
GWP-b	kg CO2 eq	7.76E-4	8.95E-6	4.59E-3	5.37E-3	1.89E-6	4.46E-3	1.27E-6	9.99E-3	1.98E-2
GWP-luluc	kg CO2 eq	1.36E-4	5.22E-6	3.18E-4	4.58E-4	1.10E-6	1.78E-5	2.54E-8	-1.01E-4	3.76E-4
ODP	kg CFC11 eq	6.27E-9	3.40E-9	2.02E-8	2.99E-8	7.16E-10	2.45E-9	3.68E-11	-7.01E-9	2.61E-8
AP	mol H+ eq	9.85E-4	8.40E-5	1.84E-4	1.25E-3	1.77E-5	1.03E-4	8.78E-7	-4.62E-4	9.13E-4
EP-fw	kg P eq	4.72E-6	1.21E-7	6.72E-7	5.52E-6	2.56E-8	5.18E-7	1.16E-9	-2.51E-6	3.55E-6
EP-m	kg N eq	1.72E-4	3.00E-5	3.43E-5	2.37E-4	6.33E-6	3.06E-5	5.67E-7	-8.51E-5	1.89E-4
EP-T	mol N eq	1.93E-3	3.31E-4	4.23E-4	2.68E-3	6.98E-5	3.36E-4	3.56E-6	-9.48E-4	2.14E-3
POCP	kg NMVOC eq	8.34E-4	9.47E-5	9.84E-5	1.03E-3	1.99E-5	1.06E-4	1.34E-6	-4.07E-4	7.48E-4
ADP-mm	kg Sb eq	4.05E-6	3.81E-7	1.56E-6	5.99E-6	8.04E-8	4.03E-7	8.89E-10	-1.03E-6	5.44E-6
ADP-f	MJ	8.97E+0	2.26E-1	5.12E+0	1.43E+1	4.77E-2	3.15E-1	2.68E-3	-4.80E+0	9.88E+0
WDP	m3 depriv.	1.84E-1	6.94E-4	8.97E-2	2.74E-1	1.46E-4	6.06E-3	1.52E-5	-9.45E-2	1.86E-1
PM	disease inc.	8.88E-9	1.33E-9	1.53E-9	1.17E-8	2.80E-10	1.67E-9	1.85E-11	-4.40E-9	9.31E-9
IR	kBq U-235 eq	5.24E-3	9.89E-4	5.99E-2	6.61E-2	2.08E-4	9.64E-4	1.24E-5	-2.81E-3	6.45E-2
ETP-fw	CTUe	2.85E+0	1.84E-1	1.72E+0	4.75E+0	3.87E-2	3.66E-1	2.25E-3	-1.37E+0	3.79E+0
HTP-c	CTUh	6.67E-11	6.54E-12	3.73E-11	1.11E-10	1.38E-12	4.55E-11	6.68E-14	-3.08E-11	1.27E-10
HTP-nc	CTUh	1.85E-9	2.19E-10	1.17E-9	3.25E-9	4.62E-11	5.44E-10	1.45E-12	-8.97E-10	2.94E-9
SQP	Pt	8.00E-1	1.94E-1	1.40E+0	2.40E+0	4.08E-2	2.49E-1	6.88E-3	-2.01E+0	6.85E-1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.28E-1	3.25E-3	7.23E-1	9.54E-1	6.84E-4	1.53E-2	1.03E-4	-3.98E-1	5.72E-1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.28E-1	3.25E-3	7.23E-1	9.54E-1	6.84E-4	1.53E-2	1.03E-4	-3.98E-1	5.72E-1
PENRE	MJ	9.62E+0	2.40E-1	5.13E+0	1.50E+1	5.06E-2	3.36E-1	2.85E-3	-5.18E+0	1.02E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	9.62E+0	2.40E-1	5.13E+0	1.50E+1	5.06E-2	3.36E-1	2.85E-3	-5.18E+0	1.02E+1
PET	MJ	9.85E+0	2.44E-1	5.86E+0	1.60E+1	5.13E-2	3.51E-1	2.95E-3	-5.57E+0	1.08E+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	2.96E-3	2.56E-5	2.88E-3	5.86E-3	5.40E-6	1.82E-4	3.30E-6	-1.58E-3	4.47E-3
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	1.35E-6	5.79E-7	1.05E-7	2.04E-6	1.22E-7	5.27E-7	3.25E-9	-1.36E-6	1.33E-6
NHWD	kg	1.28E-2	1.40E-2	2.99E-3	2.98E-2	2.96E-3	1.60E-2	1.18E-2	-4.39E-3	5.62E-2
RWD	kg	4.60E-6	1.54E-6	1.57E-7	6.30E-6	3.24E-7	1.23E-6	1.75E-8	-2.58E-6	5.29E-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