

Environmental Profile

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

Ecochain v3.5.80



Product: 3000411 - U3 Pipe GY KOMO 75x3 L=5
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

Multi-layer U3 PVC pipes from Wavin made with recycled PVC in the middle layer. The tubes contain at least 40% recycled material.

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
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 - NL - Hardenberg - 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					D Reuse- Recovery- Recycling- potential											
A5 Assembly / Construction installation process																

Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.35	0.02	0.03	0.4	0.01	0.24	0	-0.1	0.55
ADPE	kg Sb-eq	8.67E-5	3.91E-6	5.60E-6	9.62E-5	2.37E-6	1.97E-5	2.45E-8	-1.46E-5	1.04E-4
ADPF	kg Sb-eq	3.58E-2	1.13E-3	1.50E-3	3.84E-2	6.68E-4	6.94E-3	3.48E-5	-1.27E-2	3.34E-2
GWP	kg CO2-eq	3.09E+0	1.53E-1	2.67E-1	3.51E+0	9.10E-2	2.30E+0	2.19E-2	-1.16E+0	4.76E+0
ODP	kg CFC-11-eq	1.52E-6	2.71E-8	2.51E-8	1.57E-6	1.69E-8	2.78E-7	8.35E-10	-3.96E-7	1.47E-6
POCP	kg ethene-eq	2.00E-3	9.23E-5	1.18E-4	2.21E-3	5.46E-5	5.47E-4	5.83E-6	-4.57E-4	2.36E-3
AP	kg SO2-eq	1.20E-2	6.73E-4	1.05E-3	1.37E-2	3.92E-4	3.98E-3	1.85E-5	-2.65E-3	1.55E-2
EP	kg PO4 3--eq	1.60E-3	1.32E-4	1.65E-4	1.89E-3	7.82E-5	6.03E-4	7.21E-6	-3.46E-4	2.24E-3
HTP	kg 1,4-DB-eq	1.17E+0	6.44E-2	1.01E-1	1.34E+0	3.89E-2	1.08E+0	1.90E-3	-2.50E-1	2.20E+0
FAETP	kg 1,4-DB-eq	1.33E-1	1.88E-3	4.10E-3	1.39E-1	1.14E-3	1.58E-2	5.81E-4	-5.20E-3	1.51E-1
MAETP	kg 1,4-DB-eq	9.02E+1	6.77E+0	1.67E+1	1.14E+2	4.07E+0	5.20E+1	7.05E-1	-1.54E+1	1.55E+2
TETP	kg 1,4-DB-eq	5.50E-2	2.28E-4	6.26E-3	6.15E-2	1.38E-4	3.83E-3	6.25E-6	-1.71E-3	6.37E-2
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	2.91E+0	1.54E-1	3.15E-1	3.38E+0	9.18E-2	2.69E+0	2.55E-2	-1.19E+0	5.00E+0
GWP-f	kg CO2 eq	3.16E+0	1.54E-1	2.46E-1	3.56E+0	9.17E-2	2.32E+0	2.55E-2	-1.19E+0	4.81E+0
GWP-b	kg CO2 eq	-2.63E-1	7.12E-5	5.33E-2	-2.10E-1	5.57E-5	3.72E-1	3.28E-5	-5.26E-3	1.57E-1
GWP-luluc	kg CO2 eq	1.48E-2	5.65E-5	1.50E-2	2.99E-2	3.25E-5	1.07E-3	6.85E-7	-5.35E-4	3.05E-2
ODP	kg CFC11 eq	1.50E-6	3.41E-8	2.98E-8	1.56E-6	2.11E-8	2.86E-7	1.04E-9	-3.98E-7	1.47E-6
AP	mol H+ eq	1.47E-2	8.95E-4	1.34E-3	1.69E-2	5.22E-4	4.99E-3	2.48E-5	-3.25E-3	1.92E-2
EP-fw	kg P eq	1.33E-4	1.56E-6	3.52E-6	1.38E-4	7.55E-7	3.56E-5	3.10E-8	-2.78E-5	1.47E-4
EP-m	kg N eq	2.87E-3	3.15E-4	3.96E-4	3.58E-3	1.87E-4	1.22E-3	1.53E-5	-6.33E-4	4.37E-3
EP-T	mol N eq	3.05E-2	3.48E-3	4.25E-3	3.82E-2	2.06E-3	1.34E-2	9.93E-5	-7.04E-3	4.67E-2
POCP	kg NMVOC eq	1.02E-2	9.93E-4	1.20E-3	1.23E-2	5.89E-4	4.03E-3	3.37E-5	-2.34E-3	1.47E-2
ADP-mm	kg Sb eq	8.67E-5	3.91E-6	5.60E-6	9.62E-5	2.37E-6	1.97E-5	2.45E-8	-1.46E-5	1.04E-4
ADP-f	MJ	7.56E+1	2.33E+0	2.85E+0	8.08E+1	1.41E+0	1.38E+1	7.51E-2	-2.56E+1	7.04E+1
WDP	m3 depriv.	4.57E+0	8.32E-3	1.93E+0	6.50E+0	4.32E-3	5.30E-1	4.01E-4	-1.06E+0	5.98E+0
PM	disease inc.	1.48E-7	1.39E-8	2.09E-8	1.83E-7	8.28E-9	6.29E-8	5.14E-10	-2.16E-8	2.33E-7
IR	kBq U-235 eq	1.57E-1	9.75E-3	5.15E-3	1.71E-1	6.15E-3	4.79E-2	3.45E-4	-3.63E-2	1.90E-1
ETP-fw	CTUe	5.18E+1	2.08E+0	4.76E+0	5.86E+1	1.14E+0	1.01E+2	1.11E+0	-1.23E+1	1.50E+2
HTP-c	CTUh	2.14E-9	6.73E-11	1.62E-10	2.37E-9	4.07E-11	1.49E-9	1.93E-12	-4.27E-10	3.48E-9
HTP-nc	CTUh	6.29E-8	2.27E-9	4.97E-9	7.01E-8	1.36E-9	3.59E-8	2.14E-10	-1.40E-8	9.37E-8
SQP	Pt	4.39E+1	2.02E+0	2.13E-1	4.61E+1	1.20E+0	8.64E+0	1.91E-1	-8.93E+0	4.73E+1

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	8.51E+0	2.91E-2	8.60E+0	1.71E+1	2.02E-2	9.80E-1	2.71E-3	-2.16E+0	1.60E+1
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	8.51E+0	2.91E-2	8.60E+0	1.71E+1	2.02E-2	9.80E-1	2.71E-3	-2.16E+0	1.60E+1
PENRE	MJ	8.11E+1	2.47E+0	3.09E+0	8.67E+1	1.49E+0	1.46E+1	7.97E-2	-2.78E+1	7.51E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	8.11E+1	2.47E+0	3.09E+0	8.67E+1	1.49E+0	1.46E+1	7.97E-2	-2.78E+1	7.51E+1
PET	MJ	8.96E+1	2.50E+0	1.17E+1	1.04E+2	1.51E+0	1.56E+1	8.24E-2	-2.99E+1	9.11E+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	5.20E-2	2.83E-4	4.54E-2	9.77E-2	1.59E-4	1.45E-2	9.22E-5	-1.16E-2	1.01E-1
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	6.27E-5	5.90E-6	3.99E-6	7.25E-5	3.60E-6	2.21E-5	9.03E-8	-2.36E-5	7.48E-5
NHWD	kg	3.07E-1	1.48E-1	5.76E-3	4.60E-1	8.73E-2	5.13E-1	3.49E-1	-6.03E-2	1.35E+0
RWD	kg	1.42E-4	1.53E-5	7.17E-6	1.65E-4	9.57E-6	5.16E-5	4.92E-7	-3.31E-5	1.94E-4
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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