

Environmental Profile

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

Ecochain v3.5.64



Product: 4022003 - PP-INSP.CHAMP. TP 4 160X315
Unit: 1 piece
Manufacturer: Wavin - DK - Hammel - handmade

LCA standard: EN15804+A2 (2019)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 20-06-2022
End of validity: 20-06-2027
Verifier: Harry van Ewijk - SGS Search



This LCA was evaluated according to EN15804+A2 and the NMD Bepalingsmethode 1.1. It was concluded that the LCA complies with these standards.

Plastic inspection chamber made of polypropylene according to DIN EN 13598-2.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - DK - Hammel - handmade (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	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

GWP-total = EF Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF 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]

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Results

Environmental impact	Unit	A1	A2	A3	A1-A3	Total
GWP-total	kg CO2 eq	1.10E+1	1.95E-2	9.46E-2	1.11E+1	1.11E+1
GWP-f	kg CO2 eq	1.10E+1	1.95E-2	6.86E-2	1.11E+1	1.11E+1
GWP-b	kg CO2 eq	-9.09E-3	8.99E-6	2.60E-2	1.69E-2	1.69E-2
GWP-luluc	kg CO2 eq	5.14E-3	7.13E-6	3.51E-5	5.18E-3	5.18E-3
ODP	kg CFC11 eq	6.57E-7	4.30E-9	8.28E-9	6.69E-7	6.69E-7
AP	mol H+ eq	4.64E-2	1.13E-4	5.48E-4	4.71E-2	4.71E-2
EP-fw	kg P eq	2.38E-4	1.96E-7	2.92E-6	2.41E-4	2.41E-4
EP-m	kg N eq	8.32E-3	3.98E-5	1.91E-4	8.55E-3	8.55E-3
EP-T	mol N eq	9.35E-2	4.39E-4	1.79E-3	9.57E-2	9.57E-2
POCP	kg NMVOC eq	3.95E-2	1.25E-4	5.13E-4	4.01E-2	4.01E-2
ADP-mm	kg Sb eq	6.13E-4	4.93E-7	3.04E-6	6.17E-4	6.17E-4
ADP-f	MJ	3.39E+2	2.94E-1	7.45E-1	3.40E+2	3.40E+2
WDP	m3 depriv.	6.69E+0	1.05E-3	1.92E-2	6.71E+0	6.71E+0
PM	disease inc.	4.39E-7	1.75E-9	1.00E-8	4.51E-7	4.51E-7
IR	kBq U-235 eq	3.47E-1	1.23E-3	2.23E-3	3.50E-1	3.50E-1
ETP-fw	CTUe	1.16E+2	2.62E-1	2.80E+0	1.19E+2	1.19E+2
HTP-c	CTUh	3.78E-9	8.49E-12	1.30E-10	3.92E-9	3.92E-9
HTP-nc	CTUh	1.03E-7	2.86E-10	2.95E-9	1.06E-7	1.06E-7
SQP	Pt	3.35E+1	2.55E-1	5.11E-1	3.42E+1	3.42E+1
Resource use	Unit	A1	A2	A3	A1-A3	Total
PERE	MJ	3.31E+1	3.68E-3	3.36E+0	3.65E+1	3.65E+1
PERM	MJ	0	0	0	0	0
PERT	MJ	3.31E+1	3.68E-3	3.36E+0	3.65E+1	3.65E+1
PENRE	MJ	3.63E+2	3.12E-1	7.92E-1	3.64E+2	3.64E+2
PENRM	MJ	0	0	0	0	0
PENRT	MJ	3.63E+2	3.12E-1	7.92E-1	3.64E+2	3.64E+2
PET	MJ	3.96E+2	3.15E-1	4.15E+0	4.01E+2	4.01E+2
SM	kg	0	0	0	0	0
RSF	MJ	0	0	0	0	0
NRSF	MJ	0	0	0	0	0
FW	m3	1.22E-1	3.58E-5	5.11E-4	1.22E-1	1.22E-1

Output flows and waste categories	Unit	A1	A2	A3	A1-A3	Total
HWD	kg	1.08E-4	7.44E-7	1.48E-6	1.10E-4	1.10E-4
NHWD	kg	1.08E+0	1.86E-2	1.12E-2	1.11E+0	1.11E+0
RWD	kg	3.73E-4	1.93E-6	3.20E-6	3.79E-4	3.79E-4
CRU	kg	0	0	0	0	0
MFR	kg	0	0	0	0	0
MER	kg	0	0	0	0	0
EE	MJ	0	0	0	0	0
EET	MJ	0	0	0	0	0
EEE	MJ	0	0	0	0	0



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