

LCA Information

Style nr. 18188-511

Contracting organization	Mascot International A/S, Denmark
Project team	Corporate Responsibility Department, Mascot International A/S
Review of Mascot's Life-Cycle Assessment (LCA) methodology and product LCA	Quantis Sàrl, Switzerland
Method validity date	December 2023
Method	ISO 14040:2006 + A1:2020 / ISO 14044:2006 + A1:2018 + A2:2020. Product Environmental Footprint Category Rules (PEFCR) for Apparel and Footwear is followed when possible.
Description of system boundaries	Cradle to grave
LCIA method	EF 3.1 (adapted)
Data collection	Primary data – main source. Generic data from Ecoinvent v.3.10
LCA software used	SimaPro v.9.6.0.1
Data quality	Method for data quality rating (DQR) developed in alignment with the PEF requirements.
Data quality declaration	High
LCA methodology summary report	Contact responsibility@mascot.dk if you want the report.

LIFE CYCLE ASSESSMENT FACTSHEET

July 2024 version 2.0

TARGET GROUP

The 18188 is part of a collection designed for a broad target group in different work situations within trade, construction, manufacturing, industry and businesses with laundry agreements.

MASCOT® ACCELERATE

18188-511

LONG-LASTING DURABILITY

By analysing fabric performance requirements and collecting data on customer experience, the LCA is verified by Quantis for an estimated duration of service of use in hard working situations and with industrial wash every week.



CRADLE-TO-GRAVE

Cradle-to-grave is a scoping of the LCA that calculates the entire lifecycle of a product from Extraction of Raw materials to the Use & Wash and End-of-Life stages. Cradle-to-grave results are presented per use according to PEF Category Rules for Apparel and Footwear.

METHODOLOGY

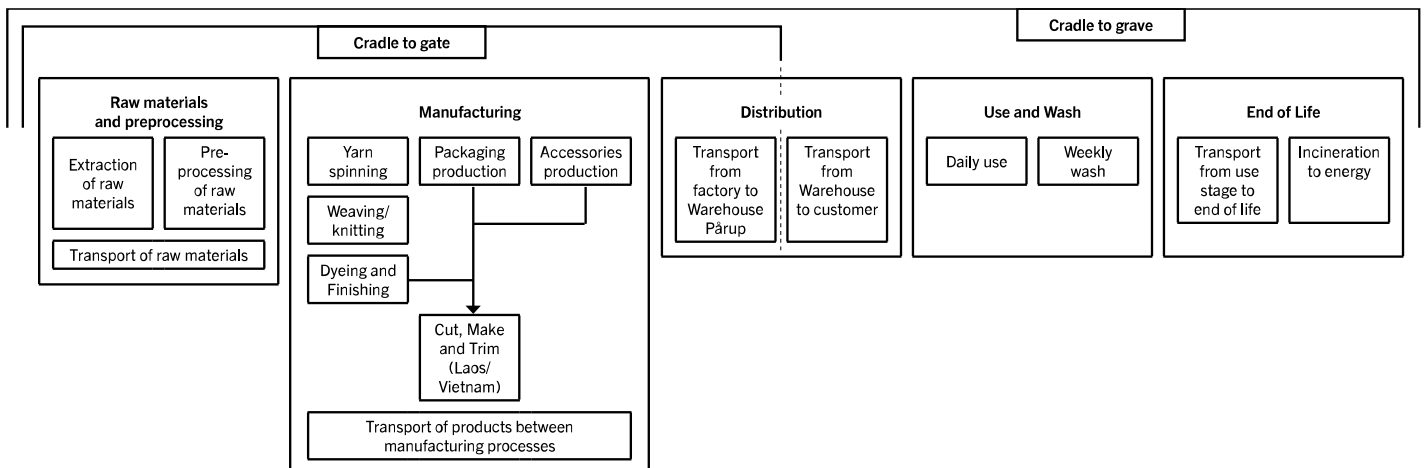
MASCOT LCAs is mainly based on primary data from own factories and suppliers. MASCOT LCAs are calculated according to ISO14040/44. The method is verified by Quantis and applies to all colours.

Cradle to Gate:
11,0kg
CO₂ per
garment

Cradle to
Grave:
0,0705kg CO₂
per use

Based on an
ISO complaint
methodology
verified by
Quantis

PROCESS CHAIN



THE 16 IMPACT FACTORS

Impact category	Damage assessment unit	Impact to-gate per garment	Impact to-grave per use
Acidification	mol H ⁺ eq	0,0661	0,00030
Climate change	kg CO ₂ eq	11,0	0,0705
Climate change - Biogenic	kg CO ₂ eq	0,0160	0,000610
Climate change - Fossil	kg CO ₂ eq	11,0	0,0686
Climate change - Land use and LU change	kg CO ₂ eq	0,0251	0,00125
Ecotoxicity, freshwater	CTUe	65,4	0,624
Ecotoxicity, freshwater - part 2	CTUe	34,4	0,1679
Ecotoxicity, freshwater - inorganics	CTUe	83,4	0,617
Ecotoxicity, freshwater - organics part 1	CTUe	10,94	0,1523
Ecotoxicity, freshwater - organics part 2	CTUe	5,57	0,0229
Particulate matter	disease inc.	0,0000006	0,000000003
Eutrophication, marine	kg N eq	0,0151	0,000093
Eutrophication, freshwater	kg P eq	0,000594	0,00000731
Eutrophication, terrestrial	mol N eq	0,136	0,000689
Human toxicity, cancer	CTUh	0,000000036	0,00000000023
Human toxicity, cancer - inorganics	CTUh	0,0000000019904	0,000000000085261
Human toxicity, cancer - organics	CTUh	0,0000000034	0,00000000022
Human toxicity, non-cancer	CTUh	0,00000020	0,0000000008
Human toxicity, non-cancer - inorganics	CTUh	0,0000001698	0,000000000751
Human toxicity, non-cancer - organics	CTUh	0,00000003	0,0000000001
Ionising radiation	kBq U ⁻²³⁵ eq	0,546	0,00226
Land use	Pt	48,3	0,345
Ozone depletion	kg CFC11 eq	0,0000138	0,00000003
Photochemical ozone formation	kg NMVOC eq	0,0491	0,000254
Resource use, fossils	MJ	165,9	1,01
Resource use, minerals and metals	kg Sb eq	0,000188	0,00000059
Water use	m ³ depriv.	21,4	0,0612