LCA Information

Style nr. 18301-231

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 Methodology is valid for 5 years
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 APOS database Reference year is 2023
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 (rated as described in PEFCR for Apparel and Footwear).
Limitations	Style studies are based on reference sizes as defined in PEFCR for apparel and footwear. Current model is also based on reference colours. For other sizes and colours, the reader is encouraged to bear this in mind.
LCA methodology summary report	Contact responsibility@mascot.dk if you are interested in the report.

MASCOT® ACCELERATE
Style: 18301-231
Main fabric: 100% PES

LIFE CYCLE ASSESSMENT FACTSHEET

March 2025 version 2.1

TARGET GROUP

The 18301 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.

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

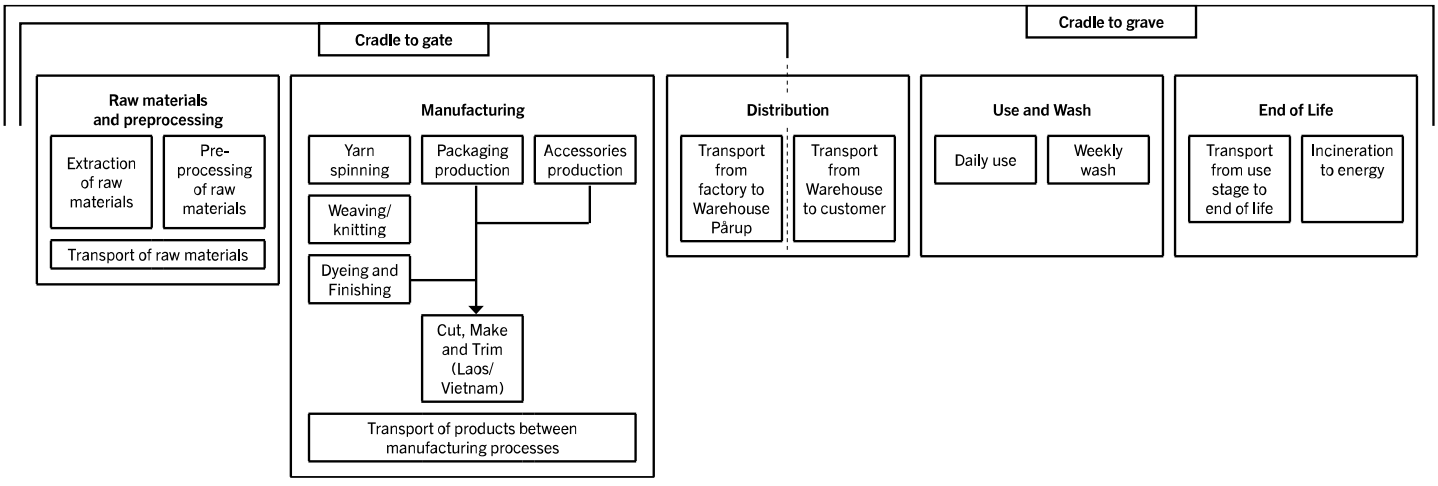
MASCOT LCAs is mainly based on primary data from own factories and suppliers. MASCOT LCAs are calculated according to ISO14040/44. The method is verified by Quantis and applies to all colours.

Cradle to Gate: 14kg CO_2 per garment

Cradle to Grave: 0,0931kg CO_2 per use

Based on an ISO compliant methodology verified by Quantis

PROCESS CHAIN



Verified by Quantis

For questions please contact Responsibility@mascot.dk

MASCOT® WORKWEAR

THE 16 IMPACT FACTORS

Impact category	Damage assessment unit	Impact to-gate per garment	Impact to-grave per use
Acidification	mol H^+ eq	0,0826	0,000384
Climate change	kg CO_2 eq	14	0,0931
Climate change - Biogenic	kg CO_2 eq	0,0246	0,000926
Climate change - Fossil	kg CO_2 eq	13,9	0,0905
Climate change - Land use and LU change	kg CO_2 eq	0,0207	0,00168
Ecotoxicity, freshwater	CTUe	77,4	0,828
Ecotoxicity, freshwater - part 2	CTUe	65,9	0,275
Ecotoxicity, freshwater - inorganics	CTUe	111	0,84
Ecotoxicity, freshwater - organics part 1	CTUe	9,26	0,194
Ecotoxicity, freshwater - organics part 2	CTUe	22,7	0,068
Particulate matter	disease inc.	0,000000689	0,0000000034
Eutrophication, marine	kg N eq	0,0147	0,000112
Eutrophication, freshwater	kg P eq	0,000751	0,0000099
Eutrophication, terrestrial	mol N eq	0,159	0,000865
Human toxicity, cancer	CTUh	0,0000000425	0,00000000029
Human toxicity, cancer - inorganics	CTUh	0,00000000254	0,0000000000112
Human toxicity, cancer - organics	CTUh	0,0000000399	0,000000000278
Human toxicity, non-cancer	CTUh	0,000000237	0,00000000107
Human toxicity, non-cancer - inorganics	CTUh	0,000000206	0,000000000962
Human toxicity, non-cancer - organics	CTUh	0,0000000309	0,00000000011
Ionising radiation	kBq U^{-235} eq	0,954	0,0036
Land use	Pt	56,2	0,43
Ozone depletion	kg CFC11 eq	0,0000161	0,0000000392
Photochemical ozone formation	kg NMVOC eq	0,0611	0,000328
Resource use, fossils	MJ	225	1,37
Resource use, minerals and metals	kg Sb eq	0,000262	0,000000832
Water use	m^3 depriv.	6,21	0,0279