LCA Information

Style nr. 18079-511

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 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: 18079-511
Main fabric: 88% rPES/12% EOL

LIFE CYCLE ASSESSMENT FACTSHEET

March 2025 version 2.1

TARGET GROUP

The 18079 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

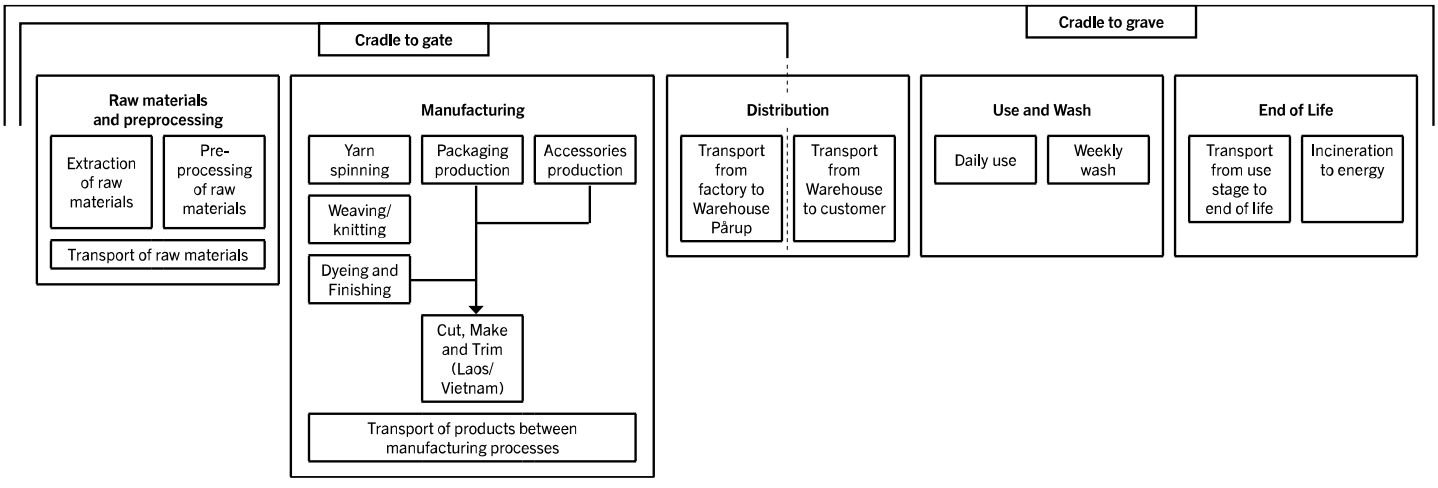
MASCOT LCAs is mainly based on primary data from own factories and suppliers. MASCOT LCAs are calculated according to ISO14040/44. The method is verified by Quantis and applies to all colours.

Cradle to Gate: 9,2kg CO_2 per garment

Cradle to Grave: 0,0723kg 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	0,0567	0,000294
Climate change	kg CO_2 eq	9,2	0,0723
Climate change - Biogenic	kg CO_2 eq	0,144	0,000972
Climate change - Fossil	kg CO_2 eq	9,04	0,07
Climate change - Land use and LU change	kg CO_2 eq	0,01	0,00138
Ecotoxicity, freshwater	CTUe	31,2	0,606
Ecotoxicity, freshwater - part 2	CTUe	24	0,155
Ecotoxicity, freshwater - inorganics	CTUe	47,5	0,588
Ecotoxicity, freshwater - organics part 1	CTUe	5,24	0,156
Ecotoxicity, freshwater - organics part 2	CTUe	2,44	0,0166
Particulate matter	disease inc.	0,000000522	0,0000000028
Eutrophication, marine	kg N eq	0,0123	0,0000942
Eutrophication, freshwater	kg P eq	0,000419	0,00000771
Eutrophication, terrestrial	mol N eq	0,117	0,000694
Human toxicity, cancer	CTUh	0,0000000213	0,000000000211
Human toxicity, cancer - inorganics	CTUh	0,0000000015	0,00000000000784
Human toxicity, cancer - organics	CTUh	0,0000000198	0,000000000203
Human toxicity, non-cancer	CTUh	0,000000142	0,00000000076
Human toxicity, non-cancer - inorganics	CTUh	0,000000126	0,00000000069
Human toxicity, non-cancer - organics	CTUh	0,0000000164	0,0000000000696
Ionising radiation	kBq U^{-235} eq	0,549	0,0024
Land use	Pt	36,4	0,348
Ozone depletion	kg CFC11 eq	0,0000013	0,0000000035
Photochemical ozone formation	kg NMVOC eq	0,0396	0,00025
Resource use, fossils	MJ	123	0,993
Resource use, minerals and metals	kg Sb eq	0,000158	0,00000055
Water use	m^3 depriv.	18,3	0,0552