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 2024		
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 <u>responsibility@mascot.dk</u> if you are interested in the report.		

Main fabric: 70%rPES/ 30%CO

# LIFE CYCLE ASSESSMENT FACTSHEET

April 2025 version 2.1

### **TARGET GROUP**

The 19669 is part of a collection designed for a broad target group in different more demanding work situations within contractors, road workers, offshore and wind sector, airport workers and sailors and 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**

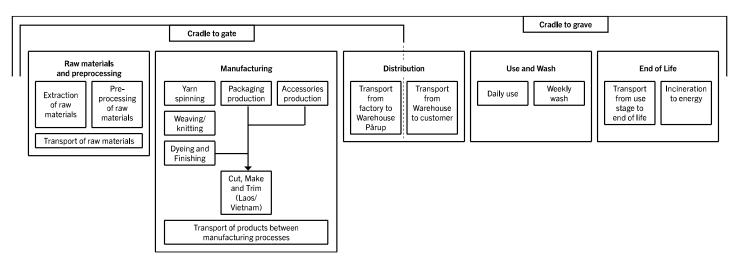
MASCOT LCAs is mainly based on primary data from own factories and suppliers. MASCOT LCAs are calculated according to ISO14040/44. The method is verified by Quantis and applies to all colours.

Cradle to Gate: 11,6 kg CO<sub>2</sub> per garment

Cradle to Grave: 0,0985 kg CO<sub>2</sub> per use Based on an ISO compliant methodology verified by Quantis



# **PROCESS CHAIN**





Style: 19669-236

Main fabric: 70%rPES/ 30%CO

# THE 16 IMPACT FACTORS

Impact category	Damage assessment	Impact to-gate	Impact to-grave
	unit	per garment	per use
Acidification	mol H⁺ eq	0,0964	0,000453
Climate change	kg CO₂ eq	11,6	0,0985
Climate change - Biogenic	kg CO₂ eq	0,16	0,00125
Climate change - Fossil	kg CO₂ eq	11,3	0,0949
Climate change - Land use and LU change	kg CO₂ eq	0,159	0,00233
Ecotoxicity, freshwater	CTUe	70,9	0,932
Ecotoxicity, freshwater - part 2	CTUe	68,2	0,302
Ecotoxicity, freshwater - inorganics	CTUe	68,5	0,842
Ecotoxicity, freshwater - organics part 1	CTUe	36,5	0,293
Ecotoxicity, freshwater - organics part 2	CTUe	34,2	0,0983
Particulate matter	disease inc.	0,000000727	0,0000000382
Eutrophication, marine	kg N eq	0,0488	0,000209
Eutrophication, freshwater	kg P eq	0,00134	0,0000129
Eutrophication, terrestrial	mol N eq	0,227	0,00112
Human toxicity, cancer	CTUh	0,0000000293	0,000000000293
Human toxicity, cancer - inorganics	CTUh	0,00000000269	0,000000000125
Human toxicity, cancer - organics	CTUh	0,0000000267	0,000000000281
Human toxicity, non-cancer	CTUh	0,000000286	0,0000000127
Human toxicity, non-cancer - inorganics	CTUh	0,00000026	0,0000000117
Human toxicity, non-cancer - organics	CTUh	0,0000000252	0,00000000103
Ionising radiation	kBq U <sup>-235</sup> eq	0,716	0,00327
Land use	Pt	118	0,637
Ozone depletion	kg CFC11 eq	0,0000025	0,00000000686
Photochemical ozone formation	kg NMVOC eq	0,0523	0,000341
Resource use, fossils	MJ	156	1,36
Resource use, minerals and metals	kg Sb eq	0,000317	0,00000102
Water use	m³ depriv.	45,9	0,127

