

# LCA Information

Style nr. 19169-711

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| Contracting organization   | Mascot International A/S, Denmark  |
| Project team   | Corporate Responsibility Department,<br>Mascot International A/S   |
| Review of Mascot's Life-Cycle Assessment (LCA) methodology and product LCA | Quantis Sàrl, Switzerland  |
| Method validity date   | December 2023<br>Methodology is valid for 5 years  |
| Method   | ISO 14040:2006 + A1:2020 / ISO 14044:2006 + A1:2018 + A2:2020.<br>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.<br>Generic data from ecoinvent v.3.10 APOS database<br>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 <a href="mailto:responsibility@mascot.dk">responsibility@mascot.dk</a> if you are interested in the report.  |

# LIFE CYCLE ASSESSMENT FACTSHEET

April 2025 version 2.1

## TARGET GROUP

The 19169 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:  
24,2 kg  
CO<sub>2</sub> per  
garment

Cradle to  
Grave: 0,161 kg  
CO<sub>2</sub> per use

Based on an  
ISO compliant  
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 |
|---|--------------------------|----------------------------|-------------------------|
| <b>Acidification</b>                      | mol H <sup>+</sup> eq    | 0,141                      | 0,00066                 |
| <b>Climate change</b>                     | kg CO <sub>2</sub> eq    | 24,2                       | 0,161                   |
| Climate change - Biogenic                 | kg CO <sub>2</sub> eq    | 0,0515                     | 0,00138                 |
| Climate change - Fossil                   | kg CO <sub>2</sub> eq    | 24                         | 0,157                   |
| Climate change - Land use and LU change   | kg CO <sub>2</sub> eq    | 0,0877                     | 0,00304                 |
| <b>Ecotoxicity, freshwater</b>            | CTUe                     | 399                        | 2,07                    |
| Ecotoxicity, freshwater - part 2          | CTUe                     | 109                        | 0,463                   |
| Ecotoxicity, freshwater - inorganics      | CTUe                     | 462                        | 2,11                    |
| Ecotoxicity, freshwater - organics part 1 | CTUe                     | 28,7                       | 0,367                   |
| Ecotoxicity, freshwater - organics part 2 | CTUe                     | 17,2                       | 0,0639                  |
| <b>Particulate matter</b>                 | disease inc.             | 0,00000131                 | 0,00000000615           |
| <b>Eutrophication, marine</b>             | kg N eq                  | 0,121                      | 0,000425                |
| <b>Eutrophication, freshwater</b>         | kg P eq                  | 0,00143                    | 0,0000175               |
| <b>Eutrophication, terrestrial</b>        | mol N eq                 | 0,303                      | 0,00157                 |
| <b>Human toxicity, cancer</b>             | CTUh                     | 0,0000000759               | 0,000000000507          |
| Human toxicity, cancer - inorganics       | CTUh                     | 0,00000000367              | 0,0000000000176         |
| Human toxicity, cancer - organics         | CTUh                     | 0,0000000723               | 0,000000000049          |
| <b>Human toxicity, non-cancer</b>         | CTUh                     | 0,000000318                | 0,00000000162           |
| Human toxicity, non-cancer - inorganics   | CTUh                     | 0,000000277                | 0,00000000146           |
| Human toxicity, non-cancer - organics     | CTUh                     | 0,0000000406               | 0,000000000016          |
| <b>Ionising radiation</b>                 | kBq U <sup>-235</sup> eq | 2,94                       | 0,00936                 |
| <b>Land use</b>                           | Pt                       | 188                        | 0,967                   |
| <b>Ozone depletion</b>                    | kg CFC11 eq              | 0,000024                   | 0,0000000597            |
| <b>Photochemical ozone formation</b>      | kg NMVOC eq              | 0,103                      | 0,000561                |
| <b>Resource use, fossils</b>              | MJ                       | 363                        | 2,3                     |
| <b>Resource use, minerals and metals</b>  | kg Sb eq                 | 0,000324                   | 0,00000115              |
| <b>Water use</b>                          | m <sup>3</sup> depriv.   | 44,6                       | 0,131                   |