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Product Carbon Footprint Analysis for **uptmdsltnm**

A detailed sustainability analysis by hvfigxerpy - Generated on June 4, 2026

33.425

kg CO2e / unit (Total PCF)

GHG

Protocol Standard

China

Production Country

Total Product Carbon Footprint

33.425 kg CO2e

Carbon Intensity (per unit)

33.425 kg CO2e

Primary Emission Hotspot

Use Phase (92.8%)

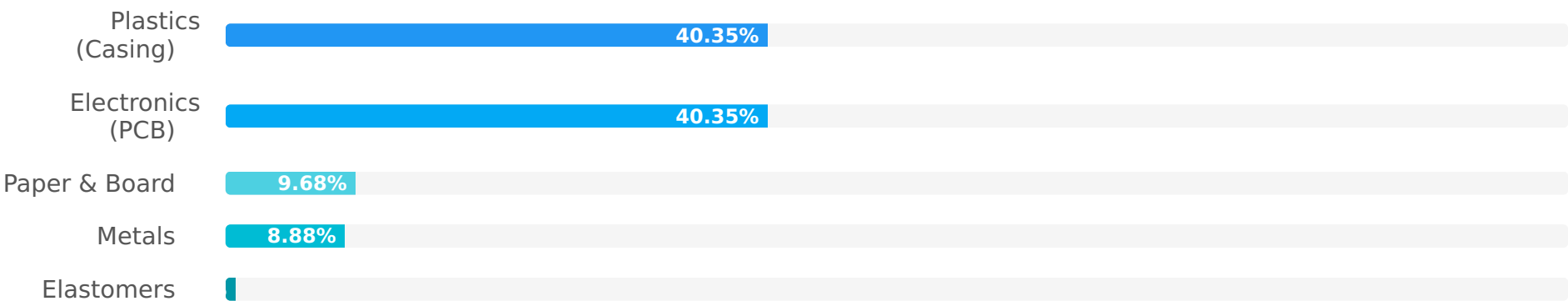
Dominant GHG Scope

Scope 3 (97.2%)

Lifecycle Emission Breakdown



Material Carbon Impact (from 1.239 kg CO2e)



Key Insights & Highlights

- The ****Use Phase**** is the most significant contributor to the product's carbon footprint, accounting for approximately 93% of total emissions.
- ****Scope 3 emissions**** are dominant, representing over 97% of the total PCF, primarily driven by downstream use and upstream material impacts.
- ****Materials acquisition****, specifically Plastics and Electronics, forms a critical upstream hotspot within the product's bill of materials.

Recommendations for Impact Reduction

1. **Optimize Use Phase Efficiency:** Prioritize product design for maximum energy efficiency, explore low-power modes, and extend product lifespan through durability enhancements.
2. **Material Innovation:** Investigate and integrate recycled content, bio-based alternatives, or materials with inherently lower embodied emissions into product components.
3. **Enhance Circularity:** Strengthen existing take-back programs, promote refurbishment, and invest in high-quality recycling infrastructure to maximize material reuse and reduce virgin material demand.
4. **Supply Chain Engagement:** Actively collaborate with upstream suppliers to identify opportunities for reducing emissions linked to raw material extraction, processing, and transportation.