

html

Product Carbon Footprint Dashboard

for Product: **umztsopwxq**

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72.51 kgCO₂e

Total Carbon Footprint per unit

Key Metrics

Total Footprint

72.51 kgCO2e

Per 1.0 unit of umztsopwxq

Carbon Intensity

72.51 kgCO2e/unit

Based on 1.0 functional unit

Top Material Hotspot

Steel Component A

(10.0 kgCO2e, 41.67% of material impact)

Primary Emission Scope

Scope 3

(61.76 kgCO2e, 85.17% of total)

Lifecycle Stage Breakdown

Use Phase	40.00 kgCO ₂ e (55.16%)
Material Acquisition & Pre-processing	24.00 kgCO ₂ e (33.10%)
Manufacturing & Production	10.75 kgCO ₂ e (14.83%)
Transport & Logistics	7.06 kgCO ₂ e (9.74%)
End-of-Life (Net Credit)	-9.30 kgCO ₂ e (12.82% reduction)

*Negative value indicates avoided emissions due to recycling credits. Represented by magnitude of reduction.

Highlights & Key Insights

- ✓ **Use Phase** The product's operational life **Dominates:** contributes 40.00 kgCO₂e (55.16%), making it the largest emission hotspot.
- ✓ **Material** Material acquisition, particularly **Embodied** Steel Component A and Plastic **Carbon:** Casing, accounts for 24.00 kgCO₂e (33.10%).
- ✓ **Scope** A staggering 85.17% (61.76 kgCO₂e) **3 is** of total emissions fall under Scope 3, **Critical:** highlighting the importance of supply chain and downstream interventions.

Recommendations for Reduction

- ✓ **Improve** Design for lower energy **Use Phase** consumption and promote green **Efficiency:** energy use by end-users.

Material Carbon Impact Breakdown

Steel Component A	10.0 kgCO ₂ e (41.67%)
Plastic Casing	7.0 kgCO ₂ e (29.17%)
Circuit Board	5.0 kgCO ₂ e (20.83%)
Copper Wire	2.0 kgCO ₂ e (8.33%)