

html

carboncalpcf.com

Product Carbon Footprint for orwmfjqef

Report Generated: May 29, 2026 by gtxshdslkj (fseqtgzikt)

~56.34

Total CO2e (kg per unit)

Functional Unit

1.0 unit

Product: orwmfjqef

System Boundary

factory_gate

Comprehensive Scope 3 coverage

Primary Emission Scope

Scope 3

Value Chain Emissions (~47.84 kg CO2e)

Top Material Hotspot

Semiconductor Chip C

~15.0 kg CO2e (of material impacts)

Lifecycle Stage Breakdown

| | |
|--------------------------------|----------------------------------|
| Raw Materials (Scope 3, Cat 1) | 51.6% (~30.14 kg CO2e) |
| Production (Scope 1 & 2) | 14.5% (~8.50 kg CO2e) |
| Use Phase (Scope 3, Cat 11) | 25.7% (~15.00 kg CO2e) |
| Logistics (Scope 3, Cat 4 & 9) | 8.0% (~4.70 kg CO2e) |
| End-of-Life (Scope 3, Cat 12) | Reduction: -3.5% (-2.00 kg CO2e) |

Top Material Carbon Impacts (of ~30.14 kg CO2e Materials Sub-Total)

| | |
|-------------------------------------|-----------------------|
| Semiconductor Chip C | 49.8% (~15.0 kg CO2e) |
| Raw Material A (Aluminum Alloy) | 41.5% (~12.5 kg CO2e) |
| Enclosure Component B (ABS Plastic) | 8.0% (~2.4 kg CO2e) |

Highlights & Key Insights

- **Raw Material Acquisition (Scope 3, Cat 1)** is the dominant emission hotspot, particularly driven by semiconductor and aluminum components.
- The **Product Use Phase (Scope 3, Cat 11)** represents a significant contributor, highlighting the importance of energy efficiency during product operation.

