

carboncalcpcf.com

Product Carbon Footprint: sdvliskowl

Company: ijfifxlpwg | Consultant: vwpdhokoif

27.52
kgCO₂e
Total PCF (per unit)

Total Footprint

27.52

kgCO₂e

Per 1.0 unit of sdvliskowl

Carbon Intensity

39.32

kgCO₂e/kg

Based on 0.7 kg product weight

Top Material Hotspot

7.50

kgCO₂e

Circuit Board (64.8% of material impact)

Primary Emission Scope

Scope 3

Use of Sold Products (12.50 kgCO₂e)

Lifecycle Stage Breakdown

Use Phase



Materials



Production



Logistics



End-of-Life (Credit)



Material Carbon Impact

Circuit Board



Aluminum Casing



Plastic Housing (PP)



Copper Wiring



Highlights & Emission Hotspots

- The **Use of Sold Products** (12.50 kgCO₂e) is the largest hotspot, driven by product energy consumption over its 5-year lifespan.
- **Purchased Goods and Services** (11.58 kgCO₂e), particularly the Circuit Board and Aluminum Casing, represents the second major contributor.
- **Manufacturing Electricity** (7.80 kgCO₂e) in China is significant, despite 40% renewable energy use, due to the grid's emission intensity.
- A substantial **End-of-Life recycling credit** (-4.76 kgCO₂e) positively impacts the overall footprint, showcasing effective circularity.

Recommendations for Reduction

- **Optimize Use Phase Energy:** Focus on designing more energy-efficient products to reduce consumer-side electricity demand.
- **Material Innovation:** Explore lower-carbon materials (e.g., recycled content, bioplastics) for components like circuit boards and aluminum casings.
- **Boost Renewable Energy:** Increase the share of renewable electricity at the China production facility to further lower Scope 2 emissions.
- **Enhance Circularity:** Strengthen take-back programs and design products for even higher recyclability and easier disassembly.