

html

wdtonxinox Product Carbon Footprint Dashboard

Company: hmesspytve | Standard: GHG Protocol | Functional Unit: 1.0 unit

18.91 kgCO2e

Total Footprint

18.91 kgCO₂e

for 1.0 unit of wdtonxinox

Carbon Intensity

18.91 kgCO₂e/unit

Calculated per functional unit

Top Material Hotspot

Aluminum Casing

3.75 kgCO₂e (58.37% of Material Impact)

Primary Emission Scope

Scope 3

16.66 kgCO₂e (88.1% of Total PCF)

Lifecycle Stage Breakdown

Use Phase	10.50 kgCO2e
Materials	6.43 kgCO2e
Production Energy	2.25 kgCO2e
Transport	0.28 kgCO2e
End-of-Life	-0.55 kgCO2e

Material Impact Breakdown

Aluminum Casing	3.75 kgCO2e
Circuit Board	1.50 kgCO2e
Plastic Components	0.60 kgCO2e
Electronic Chips	0.50 kgCO2e
Packaging Cardboard	0.08 kgCO2e

Key Emission Hotspots

- **Use Phase (55.5% of total PCF):** The most significant contributor due to energy consumption over the product's 7-year lifespan.
- **Material Acquisition & Processing (34.0% of total PCF):** Production of raw materials, especially Aluminum Casing and electronic components.
- **Scope 3 Emissions (88.1% of total PCF):** Dominates the footprint, highlighting the importance of value chain engagement.

Recommendations for Emission Reduction

- ✓ **Enhance Use Phase Efficiency:** Invest in R&D to significantly reduce product energy consumption during its lifespan. Promote the use of renewable energy by end-users.
- ✓ **Sustainable Material Sourcing:** Explore alternative, lower-carbon materials for the Aluminum Casing and electronic components.
- ✓ **Circular Economy Integration:** Strengthen take-back schemes and expand partnerships with certified recycling facilities.
- ✓ **Optimized Logistics:** Seek to optimize transport routes, consolidate shipments, and prioritize lower-emission transport modes.
- ✓ **Supply Chain Engagement:** Work closely with upstream suppliers to identify and reduce emissions within their operations.