

ENVIRONMENTAL IMPACT STATEMENT

Ball Peen Hammer 12oz - SKU: HTHM031200

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Ball Peen Hammer 12oz (SKU: HTHM031200)
Zava Hardware & Garden Supply
Product Category: Hand Tools
Release Date: March 2024

1. Carbon Impact Metrics

Carbon Footprint: The Ball Peen Hammer 12oz demonstrates a total cradle-to-gate carbon footprint of ****0.98 kg CO₂e per unit**** (independently verified by CarbonWatch Analytics, Report #CW-2024-1173).
Carbon Negative Initiatives: Zava Hardware offsets 120% of total calculated emissions per unit via investment in reforestation and verified carbon sequestration projects, rendering the product ****carbon negative**** by an additional offset of ****0.20 kg CO₂e per unit****.

2. Water Stewardship Information

- ****Water Used in Manufacturing**:** 0.42 liters per unit* (measured at the primary forge and assembly plant, ISO 14046:2014 compliant).
- ****Wastewater Management**:** 99.2% of process water is reclaimed and re-used onsite via closed-loop filtration.
- ****Supplier Water Risk**:** All raw material providers are required to operate in low to moderate water risk regions as defined by the World Resources Institute's Aqueduct Tool.

3. Biodiversity Support

- ****Material Sourcing**:** 100% of steel and hickory wood used are sourced from suppliers certified by the Forest Stewardship Council (FSC® C154572) and ResponsibleSteel™ (RS-2023-237).
- ****Habitat Protection**:** No materials are sourced from IUCN Red List habitats.
- ****Packaging**:** Packaging is made from 98% post-consumer recycled cardboard, supporting circular economy and reducing landfill impact.

4. Lifecycle Management

- ****Durability**:** Designed for a *minimum service life of 17 years* under typical usage conditions per ANSI/ASME B107.53 standards.
- ****End-of-Life**:**
- ****Metal components**:** 100% recyclable at municipal facilities (recycling code: FE-01).

- **Wood handle**: Fully biodegradable and compostable, with non-toxic, plant-based finish.
- **Takeback Program**: Free product return and recycling for worn-out tools via Zava's **ToolCycle** initiative—average recovery rate: 86.3%.

5. EcoShield Technology Benefits

- **Protective Coating**: Zava's proprietary **EcoShield** coating is water-based, solvent-free, and VOC emissions tested at **<0.02 g/L** (SCAQMD compliant).
- **Corrosion Resistance**: Increases tool lifespan by 37% compared to standard lacquers, reducing frequency of replacement and waste.

6. Supply Chain Sustainability

- **Local Sourcing**: 83% of raw materials are sourced within a 500 km radius of the assembly facility, reducing transportation emissions.
- **Supplier Auditing**: All tier-1 suppliers audited annually for environmental and social compliance (SA8000 and ISO 14001).
- **Renewable Energy Use**: 54% of assembly plant's electricity sourced from on-site solar and wind installations.

7. Third-Party Certifications

- **FSC® Chain-of-Custody** (FSC® C154572)
- **ResponsibleSteel™** (RS-2023-237)
- **ISO 14001:2015** (Environmental Management Systems)
- **CarbonNeutral® Product Certification** (Natural Capital Partners, Certificate #CN-HTHM031200-2024)
- **Cradle to Cradle Certified™ Bronze**

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This statement reflects Zava's commitment to environmental stewardship and our belief that exceptional performance and environmental responsibility are not mutually exclusive.

Environmental Impact Verified By: Pacific Northwest Sustainability Institute
Verification Date: 2025-04-08
Document ID: EIS-4590