

Bioethanol Carbon Footprint Overview

Product Carbon Footprint Analysis by carboncalcpcf.com

0.63 kg CO₂e

per 1.0 liter at factory gate

Total Footprint

0.63 kg CO₂e

for 1.0 liter

Overall greenhouse gas emissions up to factory gate.

Carbon Intensity

0.63 kg CO₂e/L

Functional Unit: 1.0 liter

Emissions normalized by the functional unit of bioethanol.

Action Plan: Decarbonization Pathways

- **Improve Energy Efficiency:** Implement energy-saving measures in production and transition to renewable energy sources (e.g., solar, wind, biomass) for process heat and electricity at the facility.
- **Optimize Agricultural Practices:** Focus on sustainable farming methods to reduce emissions from feedstock cultivation, such as precision fertilizer application, improved soil management for carbon sequestration, and no-till farming.
- **Enhance Logistics Efficiency:** Streamline the transportation of raw materials to the production facility to minimize fuel consumption and associated emissions.