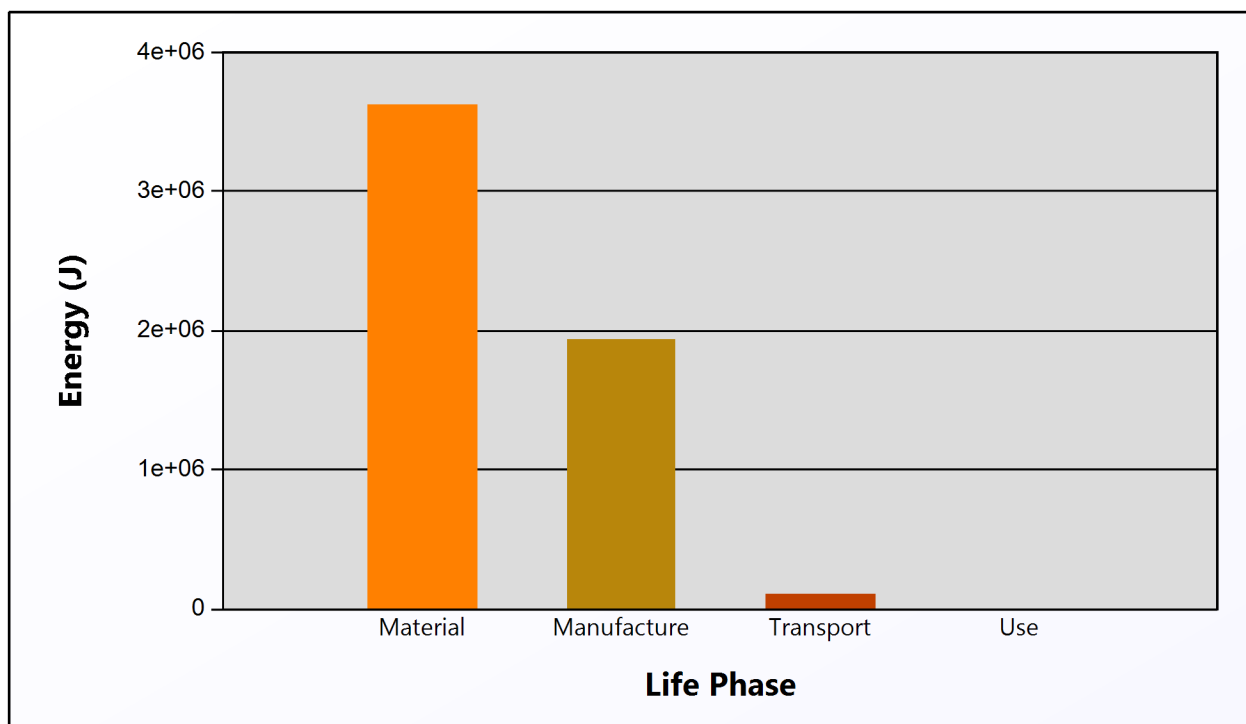


Product Name Glass Bottle
Product Life (years) 0
Includes Recycled Fraction? No
Analysis: Energy efficiency

Summary of Life Phases:

[Detailed Breakdown](#)


| Phase | Energy (J) | Energy (%) |
|--------------------|------------|------------|
| Material | 3.6e+06 | 63.8 |
| Manufacture | 1.9e+06 | 34.2 |
| Transport | 1.1e+05 | 1.9 |
| Use | 0 | 0.0 |
| Total | 5.7e+06 | 100 |

Equivalent annual energy (averaged over 0 year product life): Infinity J

Detailed Breakdown of Individual Life Phases

[Summary](#)

Material:

Analysis includes recycled fraction? No

| Component | Material | Primary Production Energy * (J/kg) | Mass (kg) | Energy (J) | % |
|-----------------|------------------|------------------------------------|------------|----------------|------------|
| Bottle | Soda-lime glass | 1.5e+07 | 0.23 | 3.5e+06 | 95.6 |
| Cap | Low carbon steel | 3.2e+07 | 0.005 | 1.6e+05 | 4.4 |
| Beverage | | 0 | 0.37 | 0 | 0.0 |
| Total | | | 0.6 | 3.6e+06 | 100 |

* When applicable, primary production values account for recycle fraction in supply

Manufacture:

| Component | Process | Processing Energy (J/kg) | Mass (kg) | Energy (J) | % |
|-----------------|------------------|--------------------------|------------|----------------|------------|
| Bottle | Glass molding | 8.6e+06 | 0.23 | 1.9e+06 | 99.4 |
| Cap | Forging, rolling | 2.4e+06 | 0.005 | 1.2e+04 | 0.6 |
| Beverage | | 0 | 0.37 | 0 | 0.0 |
| Total | | | 0.6 | 1.9e+06 | 100 |

Transport:

Breakdown by transport stage Total product mass = 0.6 kg

| Stage Name | Transport Type | Transport Energy (J/kg.m) | Distance (m) | Energy (J) | % |
|------------------|----------------|---------------------------|--------------|----------------|------------|
| Transport | 32 tonne truck | 0.46 | 4e+05 | 1.1e+05 | 100.0 |
| Total | | | 4e+05 | 1.1e+05 | 100 |

Breakdown by components Total transport distance = 4e+05 m

| Component | Mass (kg) | Energy (J) | % |
|-----------------|------------|----------------|------------|
| Bottle | 0.23 | 4.1e+04 | 37.5 |
| Cap | 0.005 | 9.2e+02 | 0.8 |
| Beverage | 0.37 | 6.8e+04 | 61.7 |
| Total | 0.6 | 1.1e+05 | 100 |

Use:

Static Mode

| | |
|------------------------------|------------------------|
| Energy Input and Output Type | Electric to mechanical |
| Energy Conversion Efficiency | 0.28 |
| CO2 Emission (kg/J) | 4.6e-08 |
| Power Rating (W) | 1.2e+02 |
| Usage (hours per day) | 24 |

Mobile Mode

| | |
|-----------------------------|-----|
| Fuel and Mobility type | |
| Energy Consumption (J/kg.m) | 0 |
| CO2 Emission (kg/kg.m) | 0 |
| Product Mass (kg) | 0.6 |
| Distance (m per day) | 0 |

| | | | |
|--------------------------|---|-------------------------|---|
| Usage (days per year) | 2 | Usage (days per year) | 0 |
| Product Life (years) | 0 | Product Life (years) | 0 |
| Total Life Usage (hours) | 0 | Total Life Distance (m) | 0 |

Relative contribution of static and mobile modes

| Mode | Energy (J) | % |
|--------|------------|-----|
| Static | 0 | |
| Mobile | 0 | |
| Total | 0 | 100 |

Breakdown of mobile mode by components

| Component | Mass (kg) | Energy (J) | % |
|-----------|-----------|------------|-----|
| Bottle | 0.23 | 0 | |
| Cap | 0.005 | 0 | |
| Beverage | 0.37 | 0 | |
| Total | 0.6 | 0 | 100 |

Notes: