

## Description

### The material

Datasheet only intended for use with the Eco-Audit tool, not for general information.

## General properties

Price	* 1.16e4	-	1.28e4	USD/lb
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## Geo-economic data for principal component

Annual world production	182	-	202	ton/yr
Reserves	6.99e4			l. ton

## Primary material production: energy, CO2 and water

Embodied energy, primary production	* 1.61e7	-	1.79e7	kcal/lb
CO2 footprint, primary production	* 8.07e3	-	8.92e3	lb/lb
Water usage	* 2.23e4	-	2.47e4	gal(US)/lb
Eco-indicator 95	4.6e6			millipoints/kg

## Material processing: energy

Casting energy	* 881	-	973	kcal/lb
Extrusion, foil rolling energy	* 264	-	293	kcal/lb
Rough rolling, forging energy	* 147	-	164	kcal/lb
Wire drawing energy	* 906	-	1e3	kcal/lb
Metal powder forming energy	* 3.31e3	-	3.64e3	kcal/lb
Vaporization energy	* 6.91e5	-	7.64e5	kcal/lb
Coarse machining energy (per unit wt removed)	* 69	-	76.3	kcal/lb
Fine machining energy (per unit wt removed)	* 226	-	250	kcal/lb
Grinding energy (per unit wt removed)	* 402	-	444	kcal/lb
Non-conventional machining energy (per unit wt removed)	6.91e3	-	7.64e3	kcal/lb

## Material processing: CO2 footprint

Casting CO2	* 0.61	-	0.674	lb/lb
Extrusion, foil rolling CO2	* 0.183	-	0.202	lb/lb
Rough rolling, forging CO2	* 0.102	-	0.113	lb/lb
Wire drawing CO2	* 0.627	-	0.693	lb/lb
Metal powder forming CO2	* 2.44	-	2.69	lb/lb
Vaporization CO2	* 479	-	529	lb/lb
Coarse machining CO2 (per unit wt removed)	* 0.0477	-	0.0528	lb/lb
Fine machining CO2 (per unit wt removed)	* 0.157	-	0.173	lb/lb
Grinding CO2 (per unit wt removed)	* 0.278	-	0.307	lb/lb
Non-conventional machining CO2 (per unit wt removed)	4.79	-	5.29	lb/lb

## Material recycling: energy, CO2 and recycle fraction

Recycle	✓			
Embodied energy, recycling	* 5.57e5	-	6.15e5	kcal/lb
CO2 footprint, recycling	* 404	-	447	lb/lb
Recycle fraction in current supply	2.81	-	3.11	%
Downcycle	✓			
Combust for energy recovery	✗			
Landfill	✓			
Biodegrade	✗			
A renewable resource?	✗			

## Environmental notes

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The recycling energy and CO2 values refer to objects made from the precious metal, not the precious metal when used as a alloying agent or finely-dispersed catalyst (for which the recycling energy and CO2 is much higher).

## Links

Producers