

## *Densities of materials*

<b>material</b>	<b>g/cm<sup>3</sup></b>	<b>lb/in<sup>3</sup></b>	<b>lb/ft<sup>3</sup></b>	<b>lb/gal</b>
water	1.00	0.036	62	8.35
aluminum	2.70	0.098	169	22.53
zinc	7.13	0.258	445	59.50
iron	7.87	0.284	491	65.68
copper	8.96	0.324	559	74.78
silver	10.49	0.379	655	87.54
lead	11.36	0.410	709	94.80
mercury	13.55	0.490	846	113.08
gold	19.32	0.698	1206	161.23

The lb/gal column is used for comparison to a gallon of milk, which weights about 8.4 lb (it's mostly water). If that milk were changed to aluminum, it would weigh about 22.5 lb. If it were changed to gold, it would weigh about 161 lb (19 gallons of water)! Did you notice that copper is heavier than iron? A cubic foot of iron is 491 lb. A cubic foot of copper is 559 lb. Silver is even heavier than copper, at 655 lb for a cubic foot. Gold is really heavy at 1206 lb for a cubic foot. When you see a movie of thieves carrying bars of gold, you know they are faking it!

---