

# Conversion Factors

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The following conversion tables are for your use:

[Conversion Tables and Formulas](#)

[Decimal and Millimeter Equivalents of Fractions](#)

## CONVERSION TABLES AND FORMULAS

| <b>Multiply</b> | <b>By</b> | <b>To Get</b>    |
|-----------------|-----------|------------------|
| Acres           | .4047     | Hectares         |
| Acres           | 43,560    | Sq. feet         |
| Acres           | 4047      | Sq. meters       |
| Acres           | .001562   | Sq. miles        |
| Atmospheres     | 1.013     | Bars             |
| Atmospheres     | 76.0      | Cm. of mercury   |
| Atmospheres     | 33.90     | Feet of water    |
| Atmospheres     | 29.92     | Inches of        |
| Atmospheres     | 101.325   | KiloPascals      |
| Atmospheres     | 14.70     | Pounds/sq. inch  |
| B.T.U.          | 778.3     | Foot-pounds      |
| B.T.U.          | 252.0     | Gram calories    |
| B.T.U.          | 1,054.8   | Joules           |
| B.T.U.          | .0002928  | Kilowatt - hours |
| Bars            | 100       | KiloPascals      |
| Bars            | 14.50     | Pounds/sq. inch  |
| Calories        | .003968   | B.T.U.           |
| Calories        | 3.0880    | Foot-pounds      |
| Centimeters     | .03281    | Feet             |

|                        |           |                     |
|------------------------|-----------|---------------------|
| Centimeters            | .3937     | Inches              |
| Centimeters            | .01       | Meters              |
| Centimeters            | 10        | Millimeters         |
| Centimeters            | 393.7     | Mils                |
| Centimeters of mercury | .01316    | Atmospheres         |
| Centimeters of mercury | .4461     | Feet of water       |
| Centimeters of mercury | .1934     | Pounds/ sq. inch    |
| Chains                 | 792       | Inches              |
| Chains                 | 20.12     | Meters              |
| Chains                 | 22        | Yards               |
| Cubic centimeters      | .00003531 | Cubic feet          |
| Cubic centimeters      | .06102    | Cubic inches        |
| Cubic centimeters      | .000001   | Cubic meters        |
| Cubic centimeters      | .001      | Liters              |
| Cubic feet             | 1728      | Cubic inches        |
| Cubic feet             | .02832    | Cubic meters        |
| Cubic feet             | .03704    | Cubic yards         |
| Cubic feet             | 7.4805    | Gallons             |
| Cubic feet             | 28.32     | Liters              |
| Cubic feet             | 59.84     | Pints (liq.)        |
| Cubic feet             | 29.92     | Quarts (Liq.)       |
| Cubic feet/minute      | .1247     | Gallons/second      |
| Cubic feet/minute      | .4719     | Liter/second        |
| Cubic feet/minute      | 62.43     | Pounds of water/min |
| Cubic feet/second      | 448,831   | Gallons/min         |
| Cubic inches           | 16.39     | Cubic centimeters   |
| Cubic inches           | .0005787  | Cubic feet          |

|                   |           |                   |
|-------------------|-----------|-------------------|
| Cubic inches      | .00001639 | Cubic meters      |
| Cubic inches      | .004329   | Gallons           |
| Cubic inches      | .01639    | Liters            |
| Cubic inches      | .03463    | Pints (liq.)      |
| Cubic inches      | .01732    | Quarts (liq.)     |
| Cubic meters      | 1,000,000 | Cubic centimeters |
| Cubic meters      | 35.31     | Cubic feet        |
| Cubic meters      | 61,023    | Cubic inches      |
| Cubic meters      | 264.2     | Gallons           |
| Cubic meters      | 2113      | Pints (liq.)      |
| Cubic meters      | 1057      | Quarts (liq.)     |
| Cubic meters/hour | 4.4       | Gallons/minute    |
| Cubic yards       | 764,600   | Cubic centimeters |
| Cubic yards       | 27        | Cubic feet        |
| Cubic yards       | 46,656    | Cubic inches      |
| Cubic yards       | .7646     | Cubic meters      |
| Cubic yards       | 202.0     | Gallons           |
| Cubic yards       | 764.6     | Liters            |
| Fathoms           | 6         | Feet              |
| Feet              | 12        | Inches            |
| Feet              | .3048     | Meters            |
| Feet              | 304.8     | Millimeters       |
| Feet of water     | .0295     | Atmospheres       |
| Feet of water     | .8826     | Inches of Mercury |
| Feet of water     | .4335     | Pounds/ sq. inch  |
| Feet/minute       | .5080     | Centimeters/sec   |

|              |        |                   |
|--------------|--------|-------------------|
| Feet/minute  | .01667 | Feet/sec.         |
| Feet/minute  | .3048  | Meters/min.       |
| Feet/minute  | .01136 | Miles/hour        |
| Feet/second  | 18.29  | Meters/min.       |
| Feet/second  | .6818  | Miles/hour        |
| Foot candles | 10.764 | Lux               |
| Gallons      | 3785   | Cubic centimeters |
| Gallons      | .1337  | Cubic feet        |
| Gallons      | 231    | Cubic inches      |

| <b>Multiply</b>         | <b>By</b>      | <b>To Get</b>               |
|-------------------------|----------------|-----------------------------|
| <u>Gallons</u>          | <u>.003785</u> | <u>Cubic meters</u>         |
| <u>Gallons</u>          | <u>3,785</u>   | <u>Liters</u>               |
| <u>Gallons</u>          | <u>8</u>       | <u>Pints (liq.)</u>         |
| <u>Gallons</u>          | <u>4</u>       | <u>Quarts (liq.)</u>        |
| <u>Gallons of water</u> | <u>8,345</u>   | <u>Pounds of water</u>      |
| <u>Gallons/minute</u>   | <u>8.0208</u>  | <u>Cubic feet/hour</u>      |
| <u>Gallons/minute</u>   | <u>3,785</u>   | <u>Liters/minute</u>        |
| <u>Gallons/minute</u>   | <u>500</u>     | <u>Pounds of water/hour</u> |
| <u>Grams</u>            | <u>.001</u>    | <u>Kilograms</u>            |
| <u>Grams</u>            | <u>1000</u>    | <u>Milligrams</u>           |
| <u>Grams</u>            | <u>.03527</u>  | <u>Ounces</u>               |
| <u>Hectares</u>         | <u>2.471</u>   | <u>Acres</u>                |
| <u>Kilograms</u>        | <u>1000</u>    | <u>Grams</u>                |
| <u>Kilograms</u>        | <u>2,205</u>   | <u>Pounds</u>               |
| <u>Kilograms/meter</u>  | <u>.6720</u>   | <u>Pounds/foot</u>          |
| <u>Kiloliters</u>       | <u>1000</u>    | <u>Liters</u>               |
| <u>Kilograms</u>        | <u>2,205</u>   | <u>Pounds</u>               |
| <u>Kilograms/meter</u>  | <u>.6720</u>   | <u>Pounds/foot</u>          |
| <u>Kiloliters</u>       | <u>1000</u>    | <u>Liters</u>               |
| <u>Kilometers</u>       | <u>100,000</u> | <u>Centimeters</u>          |
| <u>Kilometers</u>       | <u>3281</u>    | <u>Feet</u>                 |
| <u>Kilometers</u>       | <u>1000</u>    | <u>Meters</u>               |
| <u>Kilometers</u>       | <u>.6214</u>   | <u>Miles</u>                |
| <u>Kilometers</u>       | <u>1094</u>    | <u>Yards</u>                |
| <u>Kilometers/hour</u>  | <u>27.78</u>   | <u>Centimeters/sec.</u>     |
| <u>Kilometers/hour</u>  | <u>54.68</u>   | <u>Feet/min.</u>            |
| <u>Kilometers/hour</u>  | <u>.9113</u>   | <u>Feet/sec.</u>            |

|                        |              |                      |
|------------------------|--------------|----------------------|
| <u>Kilometers/hour</u> | <u>16.67</u> | <u>Meters/minute</u> |
| <u>Kilometers/hour</u> | <u>.6214</u> | <u>Miles/hour</u>    |

| <b>Multiply</b>         | <b>By</b> | <b>To Get</b>    |
|-------------------------|-----------|------------------|
| Liters                  | 1.057     | Quarts (liq.)    |
| Lumens/ sq. foot        | 10.76     | Lumens/sq. meter |
| Lux                     | 0929      | Foot-candles     |
| Meters                  | 100       | Centimeters      |
| Meters                  | 3.281     | Feet             |
| Meters                  | 39.37     | Inches           |
| Meters                  | .001      | Kilometers       |
| Meters                  | 1000      | Millimeters      |
| Meters                  | 1.094     | Yards            |
| Meters/minute           | 3.281     | Feet/minute      |
| Meters/minute           | .05468    | Feet/second      |
| Meters/minute           |           | Kilometers/hr.   |
| Meters/minute           | .03728    | Miles/hr.        |
| Meters/second           | 196.8     | Feet/minute      |
| Meters/second           | 3.281     | Feet/second      |
| Meters/second           |           | Kilometers/hr.   |
| Meters/second           | 2,237     | Miles/hr.        |
| Microns                 | .0000394  | Inches           |
| Microns                 | .000001   | Meters           |
| Miles                   | 5280      | Feet             |
| Miles                   | 1.609     | Kilometers       |
| Miles                   | 1,609     | Meters           |
| Miles                   | 1760      | Yards            |
| Miles/hour              | 4.70      | Centimeters/sec. |
| Miles/hour              | 88        | Feet/min.        |
| Miles/hour              | 1.467     | Feet/sec.        |
| Miles/hour              | 1.609     | Kilometers/hr.   |
| Miles/hour              | 26.82     | Meters/min.      |
| Milligrams              | .001      | Grams            |
| Milligrams/liter (liq.) | 1         | Parts/million    |
| Milliliters             | .001      | Liters           |
| Millimeters             | .1        | Centimeters      |
| Millimeters             | .003281   | Feet             |
| Millimeters             | .03937    | Inches           |

|                 |            |                   |
|-----------------|------------|-------------------|
| Mils            | .00254     | Centimeters       |
| Mils            | .001       | Inches            |
| Ounces          | 28.350     | Grams             |
| Ounces          | 29.47      | Milliliters       |
| Ounces          | .0625      | Pounds            |
| Pints (liq.)    | .4732      | Liters            |
| Pounds          | 16         | Ounces            |
| Pounds/sq. inch | .06804     | Atmospheres       |
| Pounds/sq. inch | 2.307      | Feet of water     |
| Pounds/sq. inch | 2.036      | Inches of mercury |
| Pounds/sq. inch | 6.897      | KiloPascals       |
| Quarts (liq.)   | .9463      | Liters            |
| Quarts (liq.)   | 32         | Ounces            |
| Rods            | 16.5       | Feet              |
| Sq. centimeters | .001076    | Sq. feet          |
| Sq. centimeters | .1550      | Sq. inches        |
| Sq. centimeters | .0001      | Sq. meters        |
| Sq. centimeters | 100        | Sq. millimeters   |
| Sq. feet        | 929        | Sq. centimeters   |
| Sq. feet        | 144        | Sq. inches        |
| Sq. feet        | .09290     | Sq. meters        |
| Sq. inches      | 6.452      | Sq. centimeters   |
| Sq. inches      | .006944    | Sq. feet          |
| Sq. inches      | 645.2      | Sq. millimeters   |
| Sq. kilometers  | 10,760,000 | Sq. feet          |
| Sq. kilometers  | 1,000,000  | Sq. meters        |
| Sq. kilometers  | .3861      | Sq. miles         |
| Sq. meters      | 10.76      | Sq. feet          |
| Sq. meters      | 1.196      | Sq. yards         |
| Sq. miles       | 640        | Acres             |
| Sq. miles       | 2.590      | Sq. kilometers    |
| Sq. yards       | 9          | Sq. feet          |
| Sq. yards       | 1,296      | Sq. inches        |
| Ton (long)      | 1016       | Kilograms         |
| Ton (long)      | 1.12       | Ton (short)       |
| Ton (long)      | 2240       | Pounds            |
| Ton (metric)    | 1000       | Kilograms         |
| Ton (metric)    | 2205       | Pounds            |
| Ton (short)     | 907.1848   | Kilograms         |

|             |        |               |
|-------------|--------|---------------|
| Ton (short) | 32,000 | Ounces        |
| Ton (short) | 2000   | Pounds        |
| Ton (short) | .89287 | Ton (long)    |
| Ton (short) | .90718 | Tons (metric) |
| Yards       | 91.44  | Centimeters   |
| Yards       | 36     | Inches        |
| Yards       | .9144  | Meters        |

All liquids are in U S fluid measurements unless otherwise stated.

## DECIMAL AND MILLIMETER EQUIVALENTS OF FRACTIONS

| <b>Fraction</b> | <b>Decimal</b> | <b>Milimeters</b> |
|-----------------|----------------|-------------------|
| <u>1/32</u>     | <u>.03125</u>  | <u>.794</u>       |
| <u>1/16</u>     | <u>.0625</u>   | <u>1.588</u>      |
| <u>3/32</u>     | <u>.09375</u>  | <u>2.381</u>      |
| <u>1/8</u>      | <u>.125</u>    | <u>3.175</u>      |
| <u>5/32</u>     | <u>.15625</u>  | <u>3.969</u>      |
| <u>3/16</u>     | <u>.1875</u>   | <u>4.763</u>      |
| <u>7/32</u>     | <u>.21875</u>  | <u>5.556</u>      |
| <u>1/4</u>      | <u>.250</u>    | <u>6.350</u>      |
| <u>9/32</u>     | <u>.28125</u>  | <u>7.144</u>      |
| <u>5/16</u>     | <u>.3125</u>   | <u>7.938</u>      |
| <u>11/32</u>    | <u>.34375</u>  | <u>8.731</u>      |
| <u>3/8</u>      | <u>.375</u>    | <u>9.525</u>      |
| <u>13/32</u>    | <u>.40625</u>  | <u>10.319</u>     |
| <u>7/16</u>     | <u>.4375</u>   | <u>11.113</u>     |
| <u>15/32</u>    | <u>.46875</u>  | <u>11.906</u>     |
| <u>1/2</u>      | <u>.500</u>    | <u>12.700</u>     |
| <u>17/32</u>    | <u>.53125</u>  | <u>13.494</u>     |
| <u>9/16</u>     | <u>.5625</u>   | <u>14.288</u>     |
| <u>19/32</u>    | <u>.59375</u>  | <u>15.081</u>     |
| <u>5/8</u>      | <u>.625</u>    | <u>15.875</u>     |
| <u>21/32</u>    | <u>.65625</u>  | <u>16.669</u>     |
| <u>11/16</u>    | <u>.6875</u>   | <u>17.463</u>     |
| <u>23/32</u>    | <u>.71875</u>  | <u>18.256</u>     |
| <u>3/4</u>      | <u>.750</u>    | <u>19.050</u>     |
| <u>25/32</u>    | <u>.78125</u>  | <u>19.844</u>     |
| <u>1 3/16</u>   | <u>.8125</u>   | <u>20.638</u>     |
| <u>27/32</u>    | <u>.84375</u>  | <u>21.431</u>     |
| <u>7/8</u>      | <u>.875</u>    | <u>22.225</u>     |
| <u>29/32</u>    | <u>.90625</u>  | <u>23.019</u>     |
| <u>15/16</u>    | <u>.9375</u>   | <u>23.813</u>     |
| <u>31/32</u>    | <u>.96875</u>  | <u>24.606</u>     |
| <u>1</u>        | <u>1.000</u>   | <u>25.400</u>     |

For more information and/or suggestions contact the Environmental Safety Compliance Officer (ESCO) at Ext. 8441 or Email [hpl-safety@hpl.umces.edu](mailto:hpl-safety@hpl.umces.edu)

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