

CONVERSION TABLES & FORMULAS

1 Bushel Equals

Wheat and Soybeans = 60 lbs.

Corn, Sorghum and Rye = 56 lbs. Barley Grain = 48 lbs.

Barley Malt = 34 lbs.

Oats = 32 lbs.

Bushels To Tonnes

Wheat and Soybeans = bushels x 0.027216

Barley Grain = bushels x 0.21772

Corn, Sorghum and Rye = bushels x 0.025401

Oats = bushels x 0.014515

Yields

Wheat: bushels per acre x 0.6725 = quintals per hectare

Rye, Corn: bushels per acre x 0.6277 = quintals per hectare

Barley: bushels per acre x 0.5380 = quintals per hectare

Oats: bushels per acre x 0.3587 = quintals per hectare

1 Tonne (metric ton) Equals

1 cubic meter of water

2204.622 lbs.

1,000 kilograms

22.046 hundredweight

10 quintals

36.7437 bushels of Wheat or Soybeans

39.3683 bushels of Corn, Sorghum or Rye

45.9296 bushels of Barley Grain

68.8944 bushels of Oats

4.5930 US bales of Cotton

Metric Weights and Conversions

1,000 grams = 1 kilogram

100 kilograms = 1 quintal

1 tonne = 1,000 kilograms = 10 quintals

1 kilogram = 2.240622 lbs.

1 quintal = 220.462 lbs.

1 tonne = 1.102 short tons

1 tonne = 0.9842 long tons

20 pennyweights = 1 ounce

16 ounces = 1 lb.

1 troy ounce = 31.103 grams

1 troy ounce = 0.0311033 kilogram

1 troy (fine) ounce = 480 grains

1 troy ounce = 155.52 metric carats

1 troy pound = 0.37224 kilogram

1 kilogram = 32.1507 troy ounces

1 tonne = 32,151 troy ounces.

U.S. Liquid Volumes and Conversions

1 ounce = 1.8047 cubic inches = 29.6 milliliters

1 cup = 8 ounces = 0.24 liter = 237 milliliters

1 pint = 16 ounces = 0.48 liter = 374 milliliters

1 gallon = 4 quarts = 231 cubic inches = 3.785 liters

= 8.345 lb

Gallons/1405.88 = Metric Tonnes

1 liter = 1.0567 quarts = 1,000 milliliters = 1,000 grams

1 milliliter = 0.033815 fluid ounce

1 liter = 33.814 fluid ounces

1 imperial gallon = 277.42 cubic inches = 1.2 US Gall.

= 4.546 Liters

Ethanol

1 bushel of corn = 2.7 gallons of Ethanol

Wet Mill: 1 bushel of corn = 9.5-10 liters of ethanol

Dry Mill: 1 bushel of corn = 9.8 liters of ethanol

Crude Oil

1 barrel = 42 US gallons = 34.97 UK (imperial) gallons

= 0.136 tonne (approx)

1 barrel per day (b/d) = 50 tonnes per year (approx)

Crude Oil Dollars per Barrel / 5.826 = Dollars per Mmbtu

Natural Gas Conversion Factors

1 Cubic Feet (cf) = 1,031 BTU

1 Cubic Meter = 35.315 Cubic Feet

Deca Therm = 10 Therms = 1 Million Btu = 1 MMBtu

1,000 cf = 1 MMBtu = 0.0001 Nat Gas NYMEX Contract

10 Million cf = 10,000 MMBtu = 1 Nat Gas NYMEX Contract

1 Billion cf = 1,000,000 MMBtu = 100 Nat Gas NYMEX Contracts

Fertilizer

34 gigajoules natural gas makes

1 tonne anhydrous ammonia

1 Nat Gas NYMEX contract makes

298.53 tons anhydrous ammonia

33,500 cubic ft nat gas makes 1 ton anhydrous ammonia

1 million BTU's = 1.054615 gigajoule

Orange Juice

1 metric ton of 65 degree brix = 344.8 gallons at 42 degree brix

1 metric ton of 65 degree brix = 1,405.88 gallons at SSE

Area Measurements

1 acre = 43,560 square feet = 0.040694
1 hectare = 2.4710 acres = 10,000 square meters
640 acres = 1 square mile = 259 hectares

Cotton Bales

US = 480 Ib (the statistical net bale used by

Brazil = 397 Ib (metric bale = 180 kg)

India = 392 Ib (metric bale = 170 kg)

Precious Metals

24 carat implies pure gold

1 metric carat = 200 milligrams

Water

1 liter weighs 1 kilogram
1 cubic meter weighs 1 tonne
1 UK gallon weighs 10.022 lbs.
1 US gallon weighs 8.345 lbs.

Temperature

-40 degrees F = -40 degrees C

32 degrees F = 0 degrees C

59 degrees F = 15 degrees C

1 metric ton = 2204.622 lbs

Florida Box = 90 lbs

Texas Box = 85 lbs

California & Arizona Boxes = 75 lbs

Brazil 40.8 kg Box = 91.4 lb

Extraction Rates

100 Grain = 72 Bread Flour

100 Raw Sugar = 92 Refined Sugar

100 Paddy Rice = 65 Milled Rice

100 Milk = 4 Butter

1 ton Barley = 105 Proof Gallon of Whisky