

Conversion Factors Table

To the right are Btu conversion factors that should be used only if you do not know the actual Btu factor of the fuels consumed at your establishment site.

If your establishment uses more precise conversion values for your operations, use them in place of the approximations given below. However, please identify in **Section: Remarks**, the conversion factor(s) used, if different from those listed to the right.

General Definitions:

Btu = British thermal unit(s)
 One barrel = 42 gallons
 One short ton = 2,000 pounds

Examples of conversion from physical quantities to Btu include:

- Your establishment consumed 250 cubic feet of hydrogen in 2006.

The Btu equivalent is:
 (250 cubic feet) x (325.11 Btu/cubic foot)
 = 81,277.5 Btu
 = 0.0813 million Btu

- Your establishment consumed 300 pounds of hydrogen in 2006.

The Btu equivalent is:
 (300 pounds) x (61,084 Btu/pound)
 = 18,325,200 Btu
 = 18.325 million Btu

Energy Source	Conversion Factor(s)
Acetylene	21,600 Btu/pound 1,500 Btu/cubic foot
Bagasse	4,081 Btu/pound
Biomass	5,300 Btu/pound
Breeze	19.8 million Btu/short ton
Butane	4.326 million Btu/barrel 0.10300 million Btu/gallon
Coal	22.489 million Btu/short ton
Coal (use for coke plants only)	27.426 million Btu/short ton
Coal Coke	24.8 million Btu/short ton
Distillate Fuel Oil	5.825 million Btu/barrel
Electricity	3,412 Btu/kilowatt-hour
Ethane	3.082 million Btu/barrel 0.07338 million Btu/gallon
Hydrogen	61,084 Btu/pound 325.11 Btu/cubic foot 35,600 Btu/gallon
Industrial Hot Water	140 Btu/pound 7.84 pounds/gallon
Isobutane	3.974 million Btu/barrel 0.09462 million Btu/gallon
Liquefied Petroleum Gas (LPG)	3.616 million Btu/barrel 0.08610 million Btu/gallon 4.5 pounds/gallon
Natural Gas	1.027 million Btu/ 1,000 cubic feet 10.27 therms/1,000 cubic feet
Petroleum Coke	6.024 million Btu/barrel 30.12 million Btu/short ton 5 barrels/short ton
Propane	3.836 million Btu/barrel 0.09133 million Btu/gallon
Pulping and/or Black Liquor	11 million Btu/short ton
Residual Fuel Oil	6.287 million Btu/barrel
Roundwood	21.5 million Btu/cord 17.2 million Btu/short ton 0.014 million Btu/board foot
Sawdust (7% moisture)	8,000 Btu/pound
Steam	1,200 Btu/pound
Still, Refinery, and/or Waste Gas	6 million Btu/barrel 1,029 Btu/cubic foot
Waste Materials (Wastepaper)	7,500 Btu/pound
Waste Oils and Tars	6 million Btu/barrel
(Green) Wood Chips (50% mois	10 million Btu/short ton
Wood Waste (50% moisture)	9 million Btu/short ton