

Terasen Gas

Commercial Energy Services

16705 Fraser Highway, Surrey, B.C. V3S 2X7
 Tel. (604) 576-7139 Fax. (604) 576-7122
 E-mail: commercial.energy@terasengas.com



ENERGY UTILIZATION DATA SHEET

DS-2800-A/R9

Date: 2004-Aug-12

Updated: Aug. 12, 2004

MISCELLANEOUS ENERGY PROPERTIES

Created by: G. Way

PHYSICAL PROPERTY	NATURAL GAS	PROPANE (Note 1)	FUEL OIL (Grade 2)	DIESEL FUEL	GASOLINE	KEROSENE	BITUMINOUS COAL
Lb/Cu Ft	0.044	0.118	52.4	53.4	45.6	51.2	90.0
Lb/USGal	N/A	4.2	7.0	7.1	6.1	6.9	N/A
Lb/ImpGal	N/A	5.1	8.4	8.6	7.3	8.2	N/A
Kg/Cu M	0.711	1.9	839	855	730	821	1441
Kg/Litre	N/A	0.507	0.839	0.855	0.729	0.821	N/A
BTU/Cu Ft	1,020	2,550	1,047,000	1,070,000	865,000	948,000	1,242,000
BTU/Cu M	36,020	90,000	36,981,000	37,773,000	30,530,000	33,468,000	43,860,000
BTU/US Gal	N/A	91,500	140,000	143,000	115,600	126,700	N/A
BTU/Imp Gal	N/A	109,900	168,000	167,200	138,800	152,200	N/A
BTU/L	N/A	24,200	37,000	37,800	30,500	33,500	N/A
GJ/Cu Ft	0.001	0.003	1.104	1.128	0.912	0.999	1.310
GJ/Cu M	0.038	0.095	39.0	39.8	32.2	35.3	46.3
GJ/US Gal	N/A	0.097	0.148	0.151	0.122	0.134	N/A
GJ/Imp Gal	N/A	0.116	0.177	0.176	0.146	0.160	N/A
GJ/Litre	N/A	0.025	0.039	0.040	0.032	0.035	N/A
MJ/Cu Ft	1.076	2.688	1,104	1,128	912	999	1,310
MJ/Cu M	38.0	94.9	39,001	39,837	32,198	35,296	46,256
BTU/Lb	23,000	21,600	20,000	19,500	19,000	18,500	13,800
GJ/Lb	0.024	0.023	0.021	0.021	0.020	0.020	0.015
BTU/Kg	50,700	47,600	44,100	43,000	41,900	40,800	30,400
GJ/Kg	0.053	0.050	0.047	0.047	0.044	0.043	0.032

- NOTES:
1. Values for Propane are for liquid form in traditional measures such as Gallons or Litres, and for gaseous form (@ S.T.P.) for other volumetric measures such as Cubic Feet or Cubic Metres. Data is based on 948,200 Btu per Gigajoule.
 2. Energy values for all fuels can vary, depending on fuel source, time of year, and other factors. This is particularly applicable to Diesel, Gasoline, and Kerosene & Coal. Numbers have been rounded.
 3. Energy values are based on Gross Heat Value (High Heat Value). Natural Gas is based on calorific value of 38.0 MJ/Cu M (1020 Btu/CF).
 4. This information is also available with reciprocal values. (DS-2800 Supplement)
 5. We believe this information to be correct and accurate, however Terasen Gas assumes no liability for errors or omissions.

Terasen Gas

Commercial Energy Services

16705 Fraser Highway, Surrey, B.C. V3S 2X7
 Tel. (604) 576-7139 Fax. (604) 576-7122
 E-mail: commercial.energy@terasengas.com



ENERGY UTILIZATION DATA SHEET

DS-2800-A/R9 (Recip)

Date: 2004-Aug-12

Updated: Aug. 12, 2004

MISCELLANEOUS ENERGY PROPERTIES

Created by: G. Way

PHYSICAL PROPERTY	NATURAL GAS	PROPANE (Note 1)	FUEL OIL (Grade 2)	DIESEL FUEL	GASOLINE	KEROSENE	BITUMINOUS COAL
Cu Ft/Lb	22.54	8.48	0.019	0.019	0.022	0.020	0.011
US Gal/Lb	N/A	0.236	0.143	0.140	0.164	0.146	N/A
Imp Gal/Lb	N/A	0.197	0.119	0.117	0.137	0.122	N/A
Cu M/Kg	1.407	0.529	0.0012	0.0012	0.0014	0.0012	0.0007
Litre/Kg	N/A	1.972	1.192	1.170	1.372	1.218	N/A
Cu Ft/Btu	9.66.E-04	3.92.E-04	9.55.E-07	9.35.E-07	1.16.E-06	1.05.E-06	8.05.E-07
Cu M/Btu	2.74.E-05	1.11.E-05	2.70.E-08	2.65.E-08	3.28.E-08	2.99.E-08	2.28.E-08
US Gal/Btu	N/A	1.09.E-05	7.14.E-06	6.99.E-06	8.65.E-06	7.89.E-06	N/A
Imp Gal/Btu	N/A	9.10.E-06	5.95.E-06	5.98.E-06	7.20.E-06	6.57.E-06	N/A
L/Btu	N/A	4.13.E-05	2.70.E-05	2.65.E-05	3.28.E-05	2.99.E-05	N/A
Cu Ft/GJ	916.1	372.1	0.905	0.887	1.097	1.001	0.763
Cu M/GJ	25.94	10.54	0.026	0.025	0.031	0.028	0.022
US Gal/GJ	N/A	10.361	6.77	6.62	8.20	7.48	N/A
Imp Gal/GJ	N/A	8.63	5.64	5.68	6.83	6.23	N/A
Litre/GJ	N/A	39.22	25.64	25.00	31.06	28.33	N/A
Cu Ft/MJ	0.930	0.372	9.05.E-04	8.87.E-04	1.10.E-03	1.00.E-03	7.63.E-04
Cu M/MJ	0.026	0.011	2.56.E-05	2.51.E-05	3.11.E-05	2.83.E-05	2.16.E-05
Lb/Btu	4.29.E-05	4.63.E-05	5.00.E-05	5.13.E-05	5.26.E-05	5.41.E-05	7.25.E-05
Lb/GJ	40.65	43.88	47.41	47.28	49.89	51.26	68.71
Kg/Btu	1.95.E-05	2.10.E-05	2.27.E-05	2.33.E-05	2.39.E-05	2.45.E-05	3.29.E-05
Kg/GJ	18.44	19.90	21.50	21.44	22.62	23.25	31.17

- NOTES:
1. Values for Propane are for liquid form in traditional measures such as Gallons or Litres, and for gaseous form (@ S.T.P.) for other volumetric measures such as Cubic Feet or Cubic Metres. Data is based on 948,200 Btu per Gigajoule.
 2. Energy values for all fuels can vary, depending on fuel source, time of year, and other factors. This is particularly applicable to Diesel, Gasoline, and Kerosene & Coal. Numbers have been rounded.
 3. Energy values are based on Gross Heat Value (High Heat Value).
 4. This is reciprocal calculation data of Energy Utilization Data Sheet DS-2800.
 5. We believe this information to be correct and accurate, however Terasen Gas assumes no liability for errors or omissions.