

Sample Natural Gas Specification			
Component	Units	Typical Analyses	Range
Methane (C1)	Mole %	94.9	87.0 - 96.0
Ethane (C2)	Mole %	2.5	1.8 - 5.1
Propane (C3)	Mole %	0.2	0.1 - 1.5
Iso Butane (iC4)	Mole %	0.03	0.01 - 0.3
normal Butanes (C4)	Mole %	0.03	0.01 - 0.3
iso Pentane (iC5)	Mole %	0.01	trace - 0.14
normal Pentanes (C5)	Mole %	0.01	trace - 0.04
Hexane + (C6+)	Mole %	0.01	trace - 0.06
Nitrogen	Mole %	1.6	1.3 - 5.6
Carbon Dioxide	Mole %	0.7	0.1 - 1.0
Oxygen	Mole %	0.02	0.01 - 0.1
Hydrogen	Mole %	trace	trace - 0.02
Specific Gravity		0.585	0.57 - 0.62
GHV (Higher heating value or gross heating value)	BTU/scf	1012.56	964.34 - 1076.85
GHV (Higher heating value or gross heating value)	MJ/scm	37.8	36.0 - 40.2

Sulphur: The typical Sulphur content could be up to 5.5 mg/m³. This includes the 4.9 mg/m³ of Sulphur in the odorant (mercaptan) added to gas for safety reasons.

Water: The water vapor content of natural gas is kept less than 80 mg/m³, and is typically 16 to 32 mg/m³.

Typical Combustion Properties of Natural Gas: Note that there is no guarantee that the combustion properties at your location will be exactly as shown. The properties shown are an overall average on the Union Gas system

Ignition Point:	593 °C *
Flammability Limits	4% - 16% (volume % in air) *
Theoretical Flame Temperature (stoichiometric air/fuel ratio)	1960 °C (3562 °F) †
Maximum Flame Velocity	0.3 m/s †
Relative density (specific gravity)	0.585 ‡
Wobbe Index (Btu/scf)	1328 ‡

† Information provided is from North American Combustion Handbook, Volume 1, 3rd edition, North American Mfg Co., 1986.

‡ Information provided is from the Chemical Composition of Natural Gas as shown on the chart above.

* Information provided is from the Union Gas Material Safety Data Sheet (WHMIS).