



MINERAL OIL TRADE

SPECIFICATIONS LIQUEFIED PETROLEUM GAS (LPG)

**Specifications required for the LIQUEFIED PETROLEUM GAS
50%Propane/50%Butane mixed**

PROPERTY	UNITS	TEST METHOD	VALUE
Ethane	mol %	G.C	0.08 max.
Propane	mol %	G.C	2 max.
Total - C4	mol %	G.C	97.5 min.
Total – C5	mol %	G.C	0.82 max.
Sp.Gr.@ (60oF/ 60oF)	---	ASTM D-2598	To Be Reported
Copper Corrosion	---	ASTM D-1838	No. 1a max.
Total Sulphide	wt.ppm	(Based On ASTM D-3246)	30 max.
Hydrogen Sulphide	vol.ppm	ASTM D-2420 / DRAGER	Nil
Vapor Press@(100 oF)	Psig	ASTM D-2598	70 max.
Water Content	vol.ppm	Shaw Dew Point	10 max.
Residue on Evaporation	vol %	ASTM D-2158	0.05 max

SPECIFICATION (Propane)

PROPERTY	UNITS	TEST METHOD	VALUE
Ethane	mol %	G.C	0.4 max.
Propane	mol %	G.C	98 min.
Butane	mol %	G.C	1.4 max.
Pentanes & Heavier	mol %	G.C	0.01 max.
Copper Corrosion	---	ASTM D-1838	No. 1a max.
Hydrogen Sulphide	vol.ppm	ASTM D-2420 / DRAGER	5 max.
Sp.Gr.@ (60oF/ 60oF)	---	ASTM D-2598	To Be Reported
Sulphur (Volatile)	wt.ppm	(Based On ASTM D-3246)	30 max.
Vapor Pressure@(100 oF)	Psig	ASTM D-2598	200 max.
Water Content	---	ASTM D-2713	pass

LPG

GENERAL

> Conforming to Indian Standard specifications	IS 4576 / IS 14861
> Vapor Pressure at 65 °C (Max)	Kg/cm ² 16.87
> Volatility. Evaporation temp. in °C	2
For 95% volume at NTP	
> Copper strip corrosion at 38 °C	Not Worse Than 1
> Dryness	No free entrained water
> Odour	Level 2

CHEMICAL COMPOSITION

Ethane %	1 max
Propane %	38 max
Is-Butane %	19 max
Nor-Butane %	41 min
Iso-Pentane and olefins %	1 max
Volatile sulfur %	0.003 max

LIQUID

Density at 15 °C	Kg/liter	0.557
Volume of liquid per kg at 15 °C	Liters	1.85
Vapor pressure at 15 °C	Bar	5.3
Gross Calorific Value	Kcal/kg	11840
Net Calorific Value	Kcal/kg	10920
Boiling Point at atmospheric pressure	°C	0

VAPOR

Density at 15 °C	Kg/m ³	2.21
Volume of gas per kg at 15 °C	m ³	0.48
Latent heat of vaporization at 15 °C	Kcal/kg	86
Gross Calorific Value	Kcal/Nm ³	26200
Net Calorific Value	Kcal/Nm ³	24100
Air required for combustion	m ³ /m ³	29