

Typical properties of commercial liquid petroleum gas (LPG)

	Commercial Butane	Commercial Propane
Relative density of liquid at 15°C	0,57 to 0,58	0,50 to 0,51
Imperial gallons/ton at 15°C	385 to 393	439 to 448
Litre/tonne at 15°C	1 723 to 1 760	1 965 to 2 019
Relative density of gas compared with air at 15°C and 1 013,25 mbar	1,90 to 2,10	1,40 to 1,55
Volume of gas (litres) per kg of liquid at 15°C and 1 013,25 mbar	406 to 431	537 to 543
Volume of gas (ft³) per lb of liquid at 60° F and 30in Hg	6,5 to 6,9	8,5 to 8,7
Boiling point at atmospheric pressure °C approx.	-2	-45
Vapour pressure for products at their maximum specified vapour pressure (gauge): <div> <div>Temp. °C</div> <div>Bar</div> <div>Bar</div> </div> <div> <div>-40</div> <div>-</div> <div>0,5</div> </div> <div> <div>-18</div> <div>*</div> <div>2,3</div> </div> <div> <div>0</div> <div>0,9</div> <div>4,5</div> </div> <div> <div>15</div> <div>1,93</div> <div>6,9</div> </div> <div> <div>38</div> <div>4,83</div> <div>14,5</div> </div> <div> <div>45</div> <div>5,86</div> <div>17,6</div> </div>		
Latent heat of vaporisation (kJ/kg) at 15°C	372,2	358,2
Latent heat of vaporisation (Btu/lb) at 60°F	160	154
Specific heat of liquid at 15°C (kJ/kg °C)	2,386	2,512

Sulphur content per cent weight	Negligible to 0,02	Negligible to 0,02
Limits of flammability (percentage by volume of gas in a gas-air mixture to form a combustible mixture)	Upper 9,0	Upper 10,0
	Lower 1,8	Lower 2,2
Calorific Values:		
Gross:		
(MJ/m³) dry	121,8	93,1
(Btu/ft³) dry	3 270	2 500
(MJ/kg)	49,3	50,0
(Btu/lb)	21 200	21 500
Nett:		
(MJ/m³) dry	112,9	86,1
(Btu/ft³) dry	3 030	2 310
(MJ/kg)	45,8	46,3
(Btu/lb)	19 700	19 900
Air required for combustion (m³ to burn 1 m³ of gas)	30	24

* Minimum Commercial Butane vapour pressure at 18° is minus 5224 mbar g.