

Propane 2.5

Product Designation	Propane 2.5
Physical state	liquefied under pressure
Chemical symbol	C ₃ H ₈
Purity	99,5 vol.%
Other names	R-290 E 944

Impurities	Maximum value
Other hydrocarbons	5000 vol. ppm

Delivery formats

In low pressure cylinders

Descriptions	cylinders/container volumes	Vapour Pressure	Content
Propane 2.5 T12 RCyl: 5,0 kg	12 l	7,4 bar	5,00 kg
Propane 2.5 T27 RCyl: 11,0 kg	27 l	7,4 bar	11,00 kg
Propane 2.5 T61 RCyl: 25,0 kg	61 l	7,4 bar	25,00 kg

Unless otherwise stated, these refer to vapour pressure at 288,15K (15°C) and to content at 288,15K (15°C) and 1,013 bar.

Other delivery formats

on request

Alumini® 12, 200 Propane 2.5

in barrels: Liquid propane 2.5

in low pressure cylinders: Propane 2.5, 3.5, LPG for automotive power to DIN 51662 and DIN EN 589, propane to DIN 51622 and R-290

optionally with dip tube

Properties	highly flammable
Valve connection	DIN 477 No. 1 (W 21.80 x 1/14 LH)
Shoulder colour	flame red (RAL 3000)
Suitable pressure regulators	WEGA range: see brochure: "Good on Top: Pressure Regulators for Specialty Gases".

Typical applications

in atomic absorption spectroscopy (AAS) as a fuel gas

in flame ionization detection as a fuel gas

in flame photometry as a fuel gas

as a component in chemical synthesis

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Conversions

1 m ³	at 288.15 K (15°C); 1 bar	=	1,880 kg
1 m ³		=	3,215 l liquid
1 kg		=	0,532 m ³
1 kg		=	1,710 l liquid
1 l liquid	at T boiling point; 1 bar	=	0,311 m ³
1 l liquid		=	0,585 kg

Physical data:

Molar Mass	Molar mass	44,10 g mol ⁻¹
Liquid State	Boiling Point	231,11 (-42,0) K (°C)
	Heat of Evaporation	426,01 kJ kg ⁻¹
	Liquid Density	582,0 kg m ⁻³
Gaseous state	Density (at 273.15 K and 1.013 bar)	2,00 kg m ⁻³
	Density Ratio to Air (at 288.15 K and 1.013 bar)	1,55
	Specific heat (at 298.15 K and 1.013 bar)	1,57 kJ kg ⁻¹ K ⁻¹
	Thermal Conductivity (at 288.15 K and 1.013 bar)	0,0210 J s ⁻¹ m ⁻¹ K ⁻¹
Critical Point	Temperature	369,82 (96,7) K (°C)
	Pressure	42,5 bar
	Density	217,0 kg m ⁻³
Triple Point	Temperature	85,5 (-187,7) K (°C)
	Vapour Pressure	3 x 10 ⁻⁹ bar
	Heat of Fusion	95,0 kJ kg ⁻¹
Additional operating	Ignition Point	743 (469,9) K (°C)
	Ignition Range in Air	1,7-10,8 vol.%
	Calorific Value to DIN 51850	101242 kJ kg ⁻³

The provided data, values and information corresponds to the state of knowledge at the time of printing. They assert no claim for accuracy or completeness and in this respect do not absolve the user from their duty of verification.
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