

Xenon 5.0

Product Designation	Xenon 5.0
Physical state	gaseous, compressed
Chemical symbol	Xe
Purity	99,999 vol.%

Impurities

	Maximum value
Oxygen	2 vol. ppm
Nitrogen	3 vol. ppm
Moisture	2 vol. ppm
Krypton	3 vol. ppm

Delivery formats

In steel cylinders

Descriptions	cylinders/container volumes	Net weight	Content
Xenon 5.0 T02 RCyl: 0,2 m3	2 l	1,1 kg	0,20 m ³
Xenon 5.0 T10 RCyl 1,50 m3	10 l	8,28 kg	1,50 m ³

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

Other delivery formats

on request

Alumini® 12, 200 Xenon 4.0

in steel cylinders: Xenon 4.0 and 4.7

Properties	asphyxiant
Valve connection	DIN 477 No. 6 (W 21.80 x 1/14)
Shoulder colour	yellow green (RAL 6018)
Suitable pressure regulators	WEGA range: see brochure: "Good on Top: Pressure Regulators for Specialty Gases".

Typical applications

- as a filling gas for insulated glass windows
- as a filling gas in xenon high-pressure lamps (automotive industry)
- as synthesis agents for particularly reactive fluorine and oxygen compounds
- for measurement of gamma and X-ray radiation
- as a laser resonator gas

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Conversions

1 m ³	at 288.15 K (15°C); 1 bar	=	5,517 kg
1 m ³		=	1,818 l liquid
1 kg		=	0,181 m ³
1 kg		=	0,330 l liquid
1 l liquid	at T boiling point; 1 bar	=	0,550 m ³
1 l liquid		=	3,035 kg

Physical data:

Molar Mass	Molar mass	131,30 g mol ⁻¹
Liquid State	Boiling Point	165,05 (-108,1) K (°C)
	Heat of Evaporation	96,30 kJ kg ⁻¹
	Liquid Density	2945,0 kg m ⁻³
Gaseous state	Density (at 273.15 K and 1.013 bar)	5,89 kg m ⁻³
	Density Ratio to Air (at 288.15 K and 1.013 bar)	4,55
	Specific heat (at 298.15 K and 1.013 bar)	0,16 kJ kg ⁻¹ K ⁻¹
	Thermal Conductivity (at 288.15 K and 1.013 bar)	0,0056 J s ⁻¹ m ⁻¹ K ⁻¹
Critical Point	Temperature	290 (16,9) K (°C)
	Pressure	58,40 bar
	Density	1110,0 kg m ⁻³
Triple Point	Temperature	161,4 (-111,8) K (°C)
	Vapour Pressure	0,8160 bar
	Heat of Fusion	17,5 kJ kg ⁻¹
Additional operating	Ignition Point	-- K (°C)
	Ignition Range in Air	-- vol.%
	Calorific Value to DIN 51850	-- kJ kg ⁻³

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