

Xenon-129, ^{129}Xe .



Chemical Purity: $\geq 99.99\%$
Isotopic Enrichment: $\geq 80\%$, or $\geq 85\%$

The element Xenon has 9 stable isotopes. ^{129}Xe is of particular interest because of its high solubility, high magnetic resonance signal intensity, and large chemical shift. Hyperpolarized ^{129}Xe allows for non-radioactive, non-invasive MRI imaging of gas diffusion in the lungs and blood flow throughout the brain. ^{129}Xe is a heavy, colorless, odorless, high pressure, noble gas. All medical grade products are mixed and packaged in under cGMP conditions in our dedicated medical gas filling room.

Physical and Chemical Properties

Chemical Purity	$\geq 99.99\%$
Isotopic Enrichment	≥ 80 atom%, or ≥ 85 atom%
Natural Abundance	26.4%
Atomic Number	54
Mass Number	129
Neutron Number	75
Atomic Mass	128.904779435 amu
Spin	+1/2
Melting Point	(101.325 kPa) 161.4 K-169.1 °F -111.7 °C, ,
Boiling point	-162.62 °F -108.12 °C, (101.325 kPa) 165.03 K,

A large variety of cylinder sizes and valve options are available.
Please inquire about specific packaging needs.

Maximum Impurities

COMPONENT	CONCENTRATION (%)
Xenon	99.95%
Nitrogen	≤ 0.5 ppm
Oxygen	≤ 0.5 ppm
Argon	≤ 0.5 ppm
Hydrogen	≤ 1 ppm
Helium	≤ 1 ppm
Neon	≤ 1 ppm
Krypton	≤ 1 ppm
Carbon Dioxide	≤ 10 ppm
Carbon Monoxide	≤ 1 ppm

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Linde Electronics and Specialty Gases

One Greenwich Street, Suite 100, Stewartville, NJ 08886
Phone +1.908.329-9700 or +1.800.932-0624, Fax +1.908.329-9740, www.lindeus.com