

# <sup>129</sup>Xe in the form of gas mixtures for hyperpolarization and magnetic resonance imaging (MRI)



Hyperpolarization of Xenon-129 is a revolutionary new diagnostic imaging tool for the magnetic resonance imaging (MRI) technology.

Hyperpolarized Xenon-129 makes it possible to capturing high-resolution, 3D images of the lung using a conventional MRI scanner.

Due to the varying solubility of Xenon in different environment, it is additionally possible to illuminate organ functions and tissue characteristics in a total way.



Our Xenon-129 gas mixtures are optimized for the use in polarizers made by Polarean Inc.\*

**Our Xenon-129 products are manufactured in accordance with cGMP regulations.**

\* [www.polarean.com](http://www.polarean.com)

# Xenon-129 in the form of gas mixtures

## Specification

### Physical and chemical properties:

- Material  $^{129}\text{Xe}$  in the form of gas mixture is available with different compositions.
- Composition Pure Xenon (Xe-129 enriched)  
Standard mixture:  
 $^{129}\text{Xe}$  - 1Vol%  
 $\text{N}_2$  - 10Vol%.  
 $\text{He}$  - 89Vol% (balance)  
*For other compositions, please contact us.*
- Enrichment  $^{129}\text{Xe}$  > 90at% or  
 $^{129}\text{Xe}$  > 80at%
- Purity All mixtures > 99.9%
- Volume Mixtures are available in 7,000 liter gas cylinder (with CGA 580 valve)  
  
Pure Xenon is available from a volume of 50 L

## Impurities in vppm

CO	$\leq 1$
CO <sub>2</sub>	$\leq 1$
H <sub>2</sub> O	$\leq 1$
O <sub>2</sub>	$\leq 1$
THC	$\leq 1$
CF <sub>4</sub>	$\leq 1$

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