

## Stable Isotopes Institute of Georgia



# <sup>129</sup>Xe Xenon

#### **Description**

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

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

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

### Impurities in ?g/g

CO	1
CO <sub>2</sub>	1
H <sub>2</sub> O	1
02	1
THC	1
CF <sub>4</sub>	1

#### **Physical and Chemical Properties:**

Material	129Xe in the form of gas mixture is available with two different compositions.
Pure Xenon (Xe-129 enriched)	Standard mixture: 129Xe - 1Vol% N2 - 10Vol%. He - 89Vol% (balance)
Enrichment	129Xe > 90at%; 129Xe > 80at%
Purity	All mixtures > 99.9%
Volume	Available in 7,000 liter gas cylinder (with CGA 580 valve)