

Stable Isotopes Institute of Georgia



¹²⁹Xe 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 ₂	1
H ₂ O	1
02	1
THC	1
CF ₄	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)