

^{17}O for Magnetic Resonance Imaging (MRI) and Scientific Applications



Nuclear magnetic resonance (NMR) technology is accelerating a revolution in medical imaging.

NMR technology based on Oxygen-17 uses the magnetic properties of atomic nuclei that occur naturally in the body.

Oxygen-17 (^{17}O) is now used for diagnostic applications and medical research to create a new generation of NMR Images.

New developments with ^{17}O enrich the quality of information about living tissue to enhance the practice of medicine in the fields of cardiology and neurology among others.

Production of Oxygen-17 is cGMP approved in compliance with the requirements of 21 Code of Federal Regulations: PARTS 210 and 211

Specification for ^{17}O in form of water

- Material ^{17}O – Oxygen 17 in form of water with different enrichments
- Isotopic content ^{17}O - 10 at %
 ^{17}O - 20 at %
 ^{17}O - 40 at %
 ^{17}O - 50 at %
 ^{17}O - 70 at %
 ^{17}O - 90 at %
- Purity > 99.9 wt %
- pH 6 - 8

Specification for ^{17}O in form of gas

- Material ^{17}O – Oxygen 17 in form of gas
- Isotopic content ^{17}O - 70 at %
- Purity > 99.9 wt %

Impurities in vol. ppm

CO	<	10
CO ₂	<	100
H ₂	<	50
N ₂	<	500

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