

# $^{18}\text{O}$ in the form of water for medical applications



Oxygen-18 is used to create tailored organochemical compounds labelled with the radio isotope  $^{18}\text{F}$  (for example, 2-fluoro-2-deoxy glucose [ $^{18}\text{F}$ FDG]). These are used for Positron Emission Tomography (PET), the latest cancer diagnostic technique.

**Our Oxygen-18 products are manufactured in accordance with cGMP regulations and with the requirements of 21 Code of Federal Regulations: PARTS 210 and 211.**

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# Oxygen-18 in the form of water

## Specification

### Physical and chemical properties:

- Material  $^{18}\text{O}$  in the form of water.
- Enrichment  $^{18}\text{O} > 98\text{at}\%$   
 $^{17}\text{O} < 2\text{at}\%$   
 $^{16}\text{O} < 2\text{at}\%$
- Purity  $> 99.9\%$
- Conductivity  $< 2 \mu\text{S}/\text{cm}$
- pH 6 – 8
- Pyrogen  $< 0.25 \text{ EU}/\text{ml}$
- Sterility passed test
- Volume Available in various volumes (please contact us).

## Impurities in $\mu\text{g}/\text{g}$ :

Al	$\leq 0.05$
Br	$\leq 0.5$
Ca	$\leq 0.1$
Cl	$\leq 0.5$
Cu	$\leq 0.01$
F	$\leq 0.05$
Fe	$\leq 0.01$
K	$\leq 0.1$
Mg	$\leq 0.05$
Na	$\leq 1$
$\text{NO}_2$	$\leq 0.1$
$\text{NO}_3$	$\leq 0.05$
$\text{PO}_4$	$\leq 0.05$
Si	$\leq 1$
$\text{SO}_4$	$\leq 0.1$
TOC	$\leq 1$
Zn	$\leq 0.05$

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