

MOLYBDENUM-99

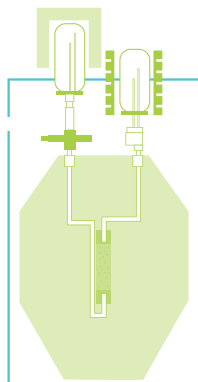
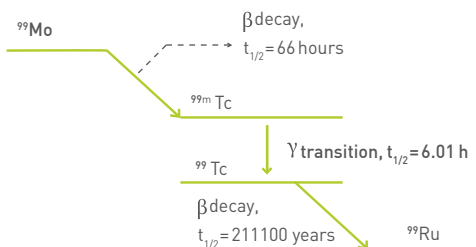
MEDICAL USE

Manufacturing of ^{99}Mo / $^{99\text{m}}\text{Tc}$ generator (Tc-99m kits) for producing radiopharmaceuticals to examine the brain, kidney, heart, bone, liver, and lung.

PRODUCT SPECIFICATIONS

• PHYSICAL FACTS

The decay scheme for ^{99}Mo production



• CHEMICAL FACTS

Chemical form: Na_2MoO_4

Solution molarity: 0.2M NaOH

Activity: at the customer's request
 $\geq 17,4$ GBq / mg (at expiry date)

Appearance: clear and colourless or almost colourless solution, precipitate free

Specific Activity: carrier free
 $\geq 87,3$ GBq / mg (at expiry date)



Radionuclidic purity (at calibration date): $^{131}\text{I} / ^{99}\text{Mo} \leq 5 * 10^{-5}$

$^{103}\text{Ru} / ^{99}\text{Mo} \leq 5 * 10^{-5}$

$^{89}\text{Sr} + ^{90}\text{Sr} / ^{99}\text{Mo} \leq 6 * 10^{-7}$

All other β / γ emitters / $^{99}\text{Mo} \leq 1 * 10^{-4}$

Total α emitters / $^{99}\text{Mo} \leq 1 * 10^{-9}$

Radiochemical purity: ^{99}Mo as MoO_4^{2-} and $\text{TcO}_4^{-1} \geq 97\%$

• PRACTICAL FACTS

Calibration: total activity to be specified at a specific date/time by the user

Delivery: according to customer requirements

Contact: Mo99@ire.eu

