

## Iotron Medical copper-67, in collaboration with Canadian Isotope Innovations

PHYSICAL DATA	
<b>Element</b>	Copper
<b>Radionuclide</b>	<sup>67</sup> Cu
<b>Half-Life</b>	61.83 h
<b>Decay Mode</b>	Beta decay
<b>Significant Emissions Beta</b>	141 keV (mean energy)
<b>Main gamma emissions</b>	91/93 keV, 185 keV, 300 keV gamma Peaks
<b>Chemical form</b>	Cu <sup>2+</sup> in aqueous Hydrochloric acid solution
<b>Solvent</b>	0.01M HCl
<b>Activity Concentration</b>	1-30 GBq/mL
<b>Activity</b>	1-15 GBq per vial
<b>Volume per vial</b>	< 500 µL
<b>Primary packaging</b>	1mL conical vial (Available for up to 2 GBq) 5 mL conical vial (Available for up to 15 GBq)
<b>Secondary packaging</b>	Type A package with lead insert (returnable)
<b>Shelf- Life</b>	240 h post calibration

RELEASE PARAMETERS		
Characteristics	Acceptance Criteria	Method
<b>Appearance</b>	Clear, colorless solution	Visual assessment
<b>Specific activity (at EOP)</b>	Clinical use > 5.55 GBq/µg Pre-clinical > 1.85 GBq/µg (for small batches only)	Based on radiolabeling with TETA
<b>Radionuclidic purity</b>	> 99.99%	Gamma Spectroscopy
<b>pH</b>	0.5-3	pH-strip
<b>Elemental analysis</b> Arsenic Lead Selenium Mercury Copper Nickle Cobalt Cadmium Zinc Iron Other Metals	< 1 µg/GBq	ICP-MS