Product Information

Isotope Program
US Department of Energy

NIDC | NATIONAL ISOTOPE DEVELOPMENT CENTER
MANAGED BY THE U.S. DEPARTMENT OF ENERGY ISOTOPE PROGRAM

Specifications

Astatine-211

Half-Life/Daughter	7.214 hours to polonium-211 and bismuth-207
Decay	Decay Radiation Information (NNDC)
Chemical Form	Sodium astatide in NaCl solution (pH 6.5-7) - UW Sodium astatide in sodium acetate solution (pH 6.5 -7) - UW Absorbed onto 3-octanone impregnated column - TAMU
Radionuclide Purity	>99% At-211 (based on gamma spectroscopy, evaluated quarterly)
Radioisotopic Purity	>99.5% (based on gamma spectroscopy, evaluated quarterly) - UW >99% At-211 (based on gamma spectroscopy) - TAMU
Radiochemical Purity	≥85% (by radioTLC peak area) Na[At-211]At; other At-211 species may be present (e.g. [At-211]astatate) - UW >99% At-211 in 3-octanone - TAMU
Production Route	Alpha irradiation of bismuth metal
Processing	Wet chemistry isolation- UW Tellurium-packed column isolation -UW Dissolution in nitric acid and SPE with 3-octanone impregnated column - TAMU
Primary Container	Screw-cap vial in approved DOT package - UW SPE column in approved DOT package - TAMU
Availability	Special order
Unit of Sale	Millicuries
Grade	Non-CGMP Grade

Other Information

- University of Washington - UW
- Texas A&M University - TAMU
- Calibration of stated activity is at the date/time of shipment for radioisotopes.