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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11810-2008

Replacing GB 11810-1989

Tin113 - Indium113m generator

锡113-铟113m发生器

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Foreword

This standard replaces GB 11810-1989 "Medical indium -113 radionuclide generator." This standard compared with GB 11810-1989 Main Have the following modifications.

--- The standard name from "Medical indium -113m radionuclide generator" with "indium tin 113- 113m generator";

--- Increased EJ/T 841-1994, EJ/T 843-1994, EJ/T 845-1994 a reference standard;

--- Deleted "HZO", "absorption capacity" and "sterile" and three definitions, to increase the "reference time" and "leaching efficiency" is defined, divided Do the original standard of "medical indium -113m radionuclide generator" and "containing zirconium content" clause amended to "indium tin 113- 113m hair Health "and" zirconium content ", while the" Content eluent "definition has been revised;

--- Deleted the original standard Chapter 4, "Categories";

--- Remove the original standard "technical content and indicators" chapter "HZO Technical indicators and sterile" and so on. Added "radiochemical pure And the concentration of radioactivity "and so on, while the content of other technical requirements have been modified;

--- Increased Chapter 5, "test method";

--- "Inspection rules" section on the "type test and factory inspection" has been modified, while increasing the "test result determination" Delete The original standard

--- Chapter 7, the original criteria from "product logo, packaging, transportation and storage" to "product marking, labeling, inspection certificates and instructions for use Book "and one of the" packaging ", " Transport "and" Storage "into a new increase in Chapter 8; new Chapter 8," Packaging, transport and Storage. " Appendix A of this standard is an informative annex. The standard proposed by China National Nuclear Corporation. This standard by the National Standardization Technical Committee on Nuclear Energy (SAC/TC58) centralized. This standard was drafted. China Nuclear Power Institute. The main drafters of this standard. Chen . This standard replaces the standards previously

issued as follows:

--- GB 11810-1989. Indium tin 113- 113 m1 generator

1 Scope

GB/T 11810-2008 is the Chinese national standard on tin113 - indium113m generator, in the field of energy and heat transfer engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 2 July 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2009. Classification: ICS 27.120.99, CCS F54. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the technical requirements of indium tin 113- 113m generator, test methods, inspection rules, marking, testing and use of said certificate Specification, packaging, transport and storage and so on. This standard applies to indium tin 113- 113m generator.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2828.1 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch inspection sampling plan

GB 11806 Regulations for the Safe Transport of Radioactive Substances EJ/T 841 radiopharmaceuticals radiochemical purity test paper chromatography EJ/T 843 radionuclide activity measurement Well type ionization chamber method EJ/T 845 Determination of radioactive drugs pH solution

3 Terms and Definitions

The following terms and definitions apply to this standard. 3.1 ^{113}Sn radioactive nuclide from the parent in a regular or irregular means eluted ^{113m}In daughter.

3.2 Generator is eluted with eluent (0.05mol/L of hydrochloric acid solution) containing the

daughter nuclide solution 113mIn.

3.3 When product testing, calibration timing generator radioactivity.

3.4 Zirconium content per unit volume of the eluent, the unit is $\mu\text{gZr/mL}$.

3.5 Daughter radioactivity within the elution volume prescribed generator eluate contained daughters and rinsed before radioactivity generated in the generator Activity ratio. 4.

Technical Requirements Technical Requirements

4.1 Generator

4.1.1 leaching efficiency Elution efficiency of the generator should be not less than 70%.