# INTERNATIONAL STANDARD ISO 3925

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

# Unsealed radioactive substances — Identification and certification

*Substances radioactives non scellées — Identification et certification*

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**Descriptors** : radioactive materials, radiation sources, unsealed sources, marking, certification.

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3925 was developed by Technical Committee ISO/TC 85, *Nuclear energy*, and was circulated to the member bodies in August 1975.

It has been approved by the member bodies of the following countries :

| | | |
|---|---|---|
| Australia | Hungary | Sweden |
| Austria | Italy | Switzerland |
| Belgium | Mexico | Thailand |
| Brazil | Netherlands | Turkey |
| Czechoslovakia | New Zealand | United Kingdom |
| Egypt, Arab Rep. of | Poland | U.S.A. |
| Finland | Romania | Yugoslavia |
| France | South Africa, Rep. of | |
| Germany | Spain | |

No member body expressed disapproval of the document.





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# Unsealed radioactive substances — Identification and certification

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes the requirements for the identification and certification of unsealed radioactive substances issued commercially by suppliers and which are intended for further handling or treatment, either physical or chemical.

Requirements for radiopharmaceuticals and standard sources are not covered.

## 2 REFERENCES

ISO 361, *Basic ionizing radiation symbol.*

ISO 921, *Nuclear energy glossary.*

## 3 DEFINITIONS

**3.1 unsealed radioactive substance :** A radioactive substance placed in an immediate container in a way enabling its further physical or chemical treatment.

**3.2 radionuclidic purity .** [Under study]

**3.3 radiochemical purity :** [Under study]

**3.4 specific activity :** see ISO 921.

**3.5 activity concentration :** see ISO 921.

## 4 IDENTIFICATION

The immediate container of the unsealed radioactive substance shall be durably and legibly marked with the following :

a) manufacturer's name or symbol;

b) chemical symbol, mass number of the radionuclide, and, if physically possible, the name of the chemical preparation;

c) radiation symbol in accordance with ISO 361, and, if physically possible, the word "RADIOACTIVE";

d) cross-reference to the certificate.

## 5 CERTIFICATE

The manufacturer shall provide a certificate which shall bear the following information as appropriate :

a) manufacturer's name and address;

b) name of the preparation and chemical form, mass number and chemical symbol of the radionuclide, and, when applicable, a statement indicating the position of the radionuclide in the molecule of the compound;

c) cross-reference to label on immediate container;

d) physical form of the preparation and solvent if present;

e) mass or volume of the preparation;

f) activity concentration and/or specific activity at stated time and date; when there is a mixture of radionuclides, the activity of each radionuclide at a specified time and date shall be stated;

g) activity at stated time and date;

h) radionuclidic purity;

j) radiochemical purity;

k) chemical purity or impurities;

l) acidity, alkalinity or pH;

m) date of production and expiry date;

n) nature and quantity of any added inactive material;

p) special conditions of storage;

q) nature of immediate container.