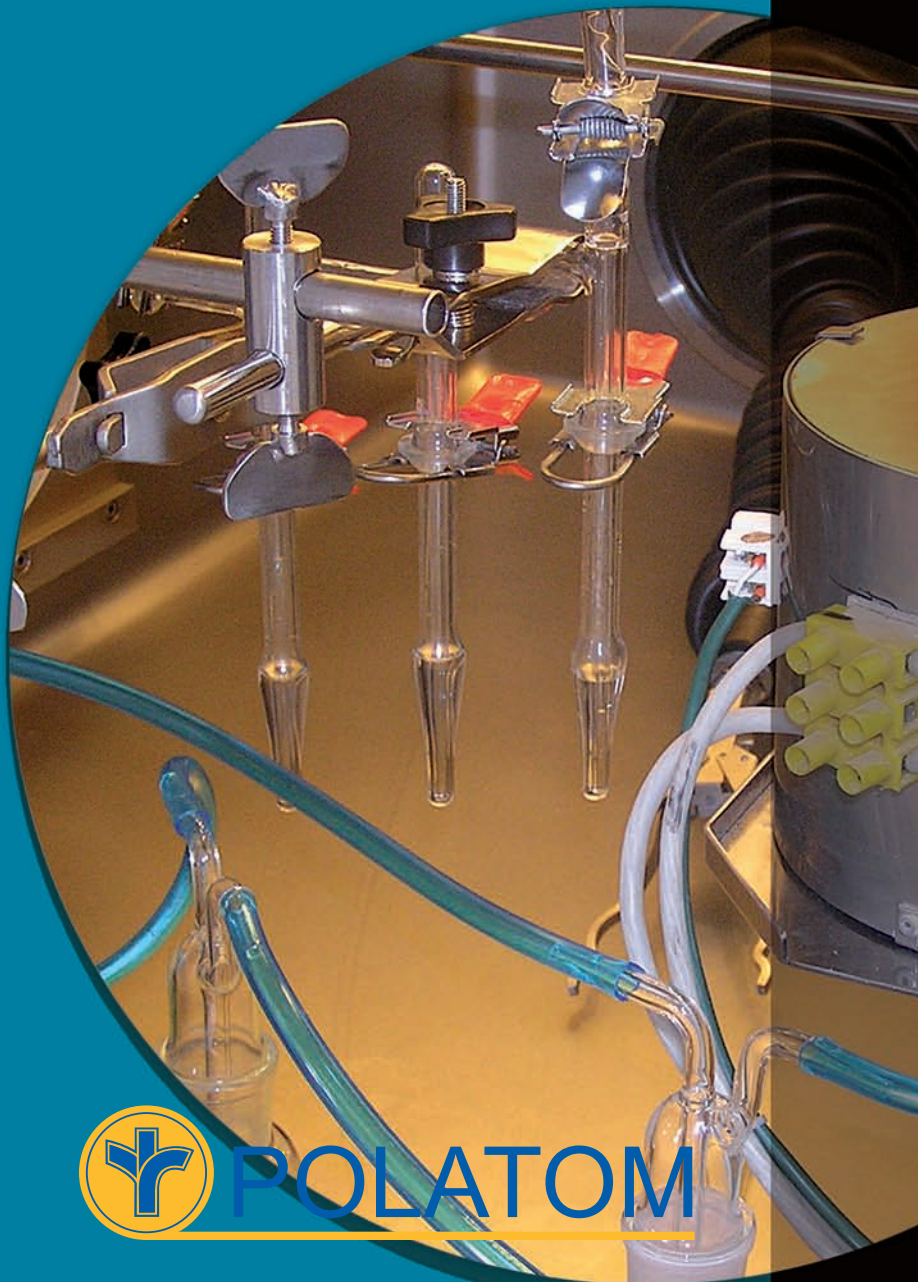


Radiochemicals

2012



POLATOM

Contents

| | |
|---|--------|
| Producer | str. 3 |
| Labeling, certificates, calibration | 4 |
| Packaging | 4 |
| List of radiochemicals | 6 |
| Antimony ^{124}Sb | 6 |
| Arsenic ^{76}As | 6 |
| Barium ^{131}Ba | 6 |
| Barium ^{133}Ba | 6 |
| Bromine ^{82}Br | 7 |
| Cadmium ^{109}Cd | 7 |
| Cadmium $^{115\text{m}}\text{Cd}$ | 7 |
| Caesium ^{131}Cs | 7 |
| Caesium ^{134}Cs | 8 |
| Caesium ^{137}Cs | 8 |
| Calcium ^{45}Ca | 8 |
| Chromium ^{51}Cr | 8 |
| Cobalt ^{58}Co | 9 |
| Cobalt ^{60}Co | 9 |
| Copper ^{64}Cu | 10 |
| Europium ^{152}Eu | 10 |
| Europium $^{152+154}\text{Eu}$ | 10 |
| Gold ^{198}Au | 10 |
| Holmium ^{166}Ho | 11 |
| Iodine ^{131}I | 11 |
| Indium $^{114\text{m}}\text{In}$ | 11 |
| Iron ^{55}Fe | 11 |
| Iron ^{59}Fe | 12 |
| Iridium ^{192}Ir | 12 |
| Lanthanum ^{140}La | 12 |
| Lutetium ^{177}Lu | 13 |
| Neodymium ^{147}Nd | 13 |
| Phosphorus ^{32}P | 13 |
| Rhenium ^{186}Re | 14 |
| Rubidium ^{86}Rb | 14 |
| Samarium ^{153}Sm | 15 |
| Scandium ^{46}Sc | 15 |
| Selenium ^{75}Se | 15 |
| Silver $^{110\text{m}}\text{Ag}$ | 15 |
| Sodium ^{24}Na | 16 |
| Strontium ^{85}Sr | 16 |
| Strontium ^{89}Sr | 16 |
| Strontium ^{90}Sr | 16 |
| Sulphur ^{35}S | 17 |
| Terbium ^{160}Tb | 17 |
| Thallium ^{204}Tl | 18 |
| Thulium ^{170}Tm | 18 |
| Tin ^{113}Sn | 18 |
| Tungsten ^{188}W | 18 |
| Ytterbium ^{169}Yb | 19 |
| Yttrium ^{90}Y | 19 |
| Zinc ^{65}Zn | 19 |

Producer

Radioisotope Centre POLATOM is a part of National Centre for Nuclear Research (NCBJ). With over 50 years of experience in the isotopes we are focused on the following products: radiopharmaceuticals, standard solutions and reference sources, industrial sealed sources and listed here radiochemicals.

At present our products are regularly used in more than 50 countries all over the world.

The production, sales, dispatching and transport of isotopic products fulfill requirements of standard PN-EN ISO 9001: 2009 and the criteria of International Control System.

Orders

When ordering please specify at least the following information:

- the specific product code
- name of the product
- activity
- quantity
- required shipping date

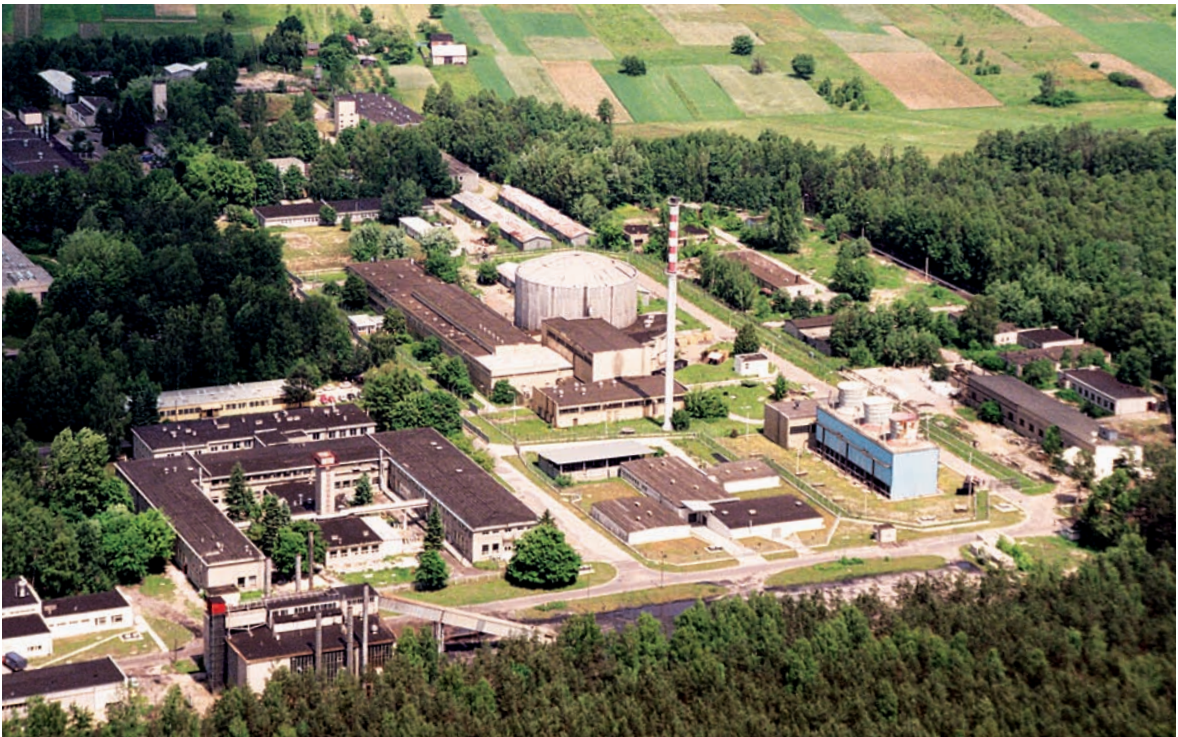
Orders and enquires should be sent to:

National Centre for Nuclear Research (NCBJ), Radioisotope Centre POLATOM

7 Sołtana Str. 05-400 Otwock, POLAND

phone: +48 22 7180820 or 7180840, fax: +48 22 7797381

e-mail: polatom@polatom.pl www.polatom.pl





Labelling, certificates, calibration

Label on a packaging contains data referring to the preparation: the nature of the product, activity at a given date, the volume, lot number, expiration, the product code, container type and number, bar code and certificate number.

A certificate and, for some preparations also application instructions, are attached to every shipment of radioactive material.

Calibration specifies time (hours, days) after shipping, for which the nominal activity is calculated.

Packaging

Determination of the type of packaging is settled by dangerous nature of the transported material: depending on its radiotoxicity, radioactivity and its tendency to spread.

Packing and transportation of radiochemical preparations are performed in accordance with International Atomic Energy Agency (IAEA) requirements and the Regulations for Safe Transport of Radioactive materials.

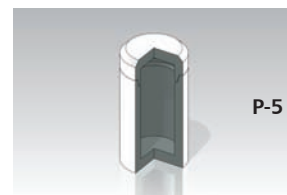
The typical packaging of radioactive material consists of the following elements:

- vial
- shielding container
- metal can with styrofoam mould
- external cardboard box

Radioactive materials in vials are shipped in shielding containers. The containers are sealed in a metal can containing a styrofoam mould. The can is fixed inside cardboard packaging.

Standard shielding containers type A used for radiochemicals

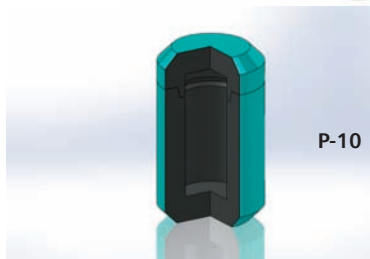
| Container type | Shielding/ material coverage | Lead screen [mm] | Internal seating sizes $\varnothing \times h$ [mm] | External sizes $\varnothing \times h$ [mm] | Mass of the container [kg] | Mass of the transport packaging [kg] |
|----------------|------------------------------------|------------------------|---|--|----------------------------------|---|
| P-5 | Lead / painted | 5 | 25 × 55 | 35 × 66 | 0.44 | 1.14 |
| P-7Z | Lead / plastic | 7 | 20.6 × 43.4 | 44 × 65 | 0.45 | 1.15 |
| P-10 | Lead / painted | 10 | 25 × 54 | 45 × 75 | 1.00 | 1.70 |
| P-20 | Lead / plastic | 20 | 28 × 54 | 65 × 95 | 2.92 | 3.62 |
| P-30 | Lead / plastic | 30 | 28 × 52 | 87 × 112.5 | 6.11 | 6.80 |
| P-50 | Lead / painted | 50 | 35 × 85 | 142 × 187 | 32.0 | 36.0 |
| P-60 | Lead / steel | 60 | 33 × 70 | 165 × 235 | 44.5 | 48.4 |



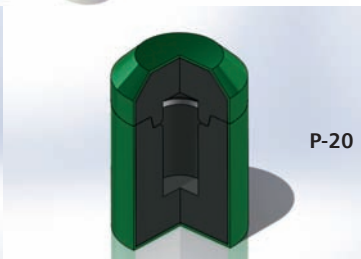
P-5



P-7Z



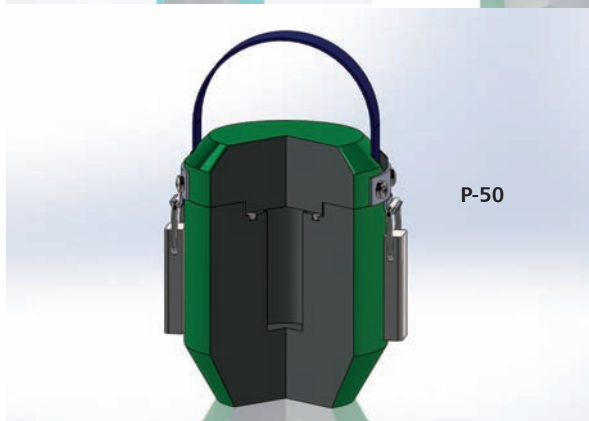
P-10



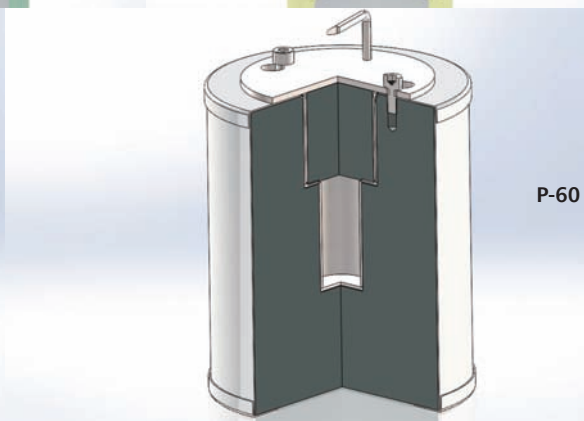
P-20



P-30



P-50



P-60

Antimony ¹²⁴Sb**RSb-4**

| | |
|------------------------|--|
| Name, chemical formula | Antimony (III) chloride, SbCl ₃ |
| Half life | 60.2 days |
| Form | 5 M HCl solution |
| Radionuclidic purity | > 99.0% (including ¹²² Sb) |
| Specific activity | > 20 MBq / mg Sb |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~3 weeks advanced order |

Arsenic ⁷⁶As**RAs-3**

| | |
|------------------------|---|
| Name, chemical formula | Arsenic (III) chloride, AsCl ₃ |
| Half life | 1.078 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 10 MBq / mg As |
| Calibration | 24 hours |
| Expiration | 3 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~2 weeks advanced order |

Barium ¹³¹Ba**RBa-2**

| | |
|------------------------|------------------------------------|
| Name, chemical formula | Barium chloride, BaCl ₂ |
| Half life | 11.5 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 1 MBq / mg Ba |
| Calibration | 3 days |
| Expiration | 7 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~3 weeks advanced order |

Barium ¹³³Ba**RBa-7**

| | |
|------------------------|------------------------------------|
| Name, chemical formula | Barium chloride, BaCl ₂ |
| Half life | 10.7 years |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 10 MBq / mg Ba |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Bromine ⁸²Br

RBr-2

| | |
|------------------------|--------------------------------------|
| Name, chemical formula | Ammonium bromide, NH ₄ Br |
| Half life | 1,47 days |
| Form | aqueous solution |
| Radionuclidic purity | > 98.0% |
| Specific activity | > 20 MBq / mg Br |
| pH | 6.0 – 8.0 |
| Calibration | 24 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~2 weeks advanced order |

Cadmium ¹⁰⁹Cd

RCd-1

| | |
|------------------------|-------------------------------------|
| Name, chemical formula | Cadmium chloride, CdCl ₂ |
| Half life | 462.6 days |
| Form | 0.5 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 20.0 MBq / mg Cd |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Cadmium ^{115m}Cd

RCd-3

| | |
|------------------------|-------------------------------------|
| Name, chemical formula | Cadmium chloride, CdCl ₂ |
| Half life | 44.56 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 95.0% |
| Specific activity | > 1.0 MBq / mg Cd |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~6 weeks advanced order |

Caesium ¹³¹Cs

RCs-1

| | |
|------------------------|------------------------|
| Name, chemical formula | Caesium chloride, CsCl |
| Half life | 9.69 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | carrier free |
| Calibration | 2 days |
| Expiration | 7 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Caesium ¹³⁴Cs

RCs-2

| | |
|------------------------|------------------------|
| Name, chemical formula | Caesium chloride, CsCl |
| Half life | 2.065 years |
| Form | aqueous solution |
| Radionuclidic purity | > 98.0% |
| Specific activity | > 200 MBq / mg Cs |
| pH | 6.0 – 8.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Caesium ¹³⁷Cs

RCs-3

| | |
|------------------------|------------------------|
| Name, chemical formula | Caesium chloride, CsCl |
| Half life | 30.018 years |
| Form | 0.1M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | carrier free |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Calcium ⁴⁵Ca

RCa-3

| | |
|------------------------|-------------------------------------|
| Name, chemical formula | Calcium chloride, CaCl ₂ |
| Half life | 163 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.9% |
| Specific activity | > 20 MBq / mg Ca |
| pH | 5.0 – 8.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Chromium ⁵¹Cr

RCr-2

| | |
|------------------------|--|
| Name, chemical formula | Chromium (III) chloride, CrCl ₃ |
| Half life | 27.7 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Radiochemical purity | > 95.0% |
| Specific activity | > 3.7 GBq / mg Cr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Chromium ⁵¹Cr

RCr-3

| | |
|------------------------|--|
| Name, chemical formula | Sodium chromate (VI), Na ₂ CrO ₄ |
| Half life | 27.7 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Radiochemical purity | > 95.0% |
| Specific activity | > 3.7 GBq / mg Cr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Chromium ⁵¹Cr

RCr-9

| | |
|------------------------|---|
| Name, chemical formula | EDTA-Cr (III) complex, EDTA-CrCl ₃ |
| Half life | 27,7 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Radiochemical purity | > 95.0% |
| Specific activity | > 3.7 GBq / mg Cr |
| pH | 5.0 – 8.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Cobalt ⁵⁸Co

RCo-2

| | |
|------------------------|---|
| Name, chemical formula | Cobalt (II) chloride, CoCl ₂ |
| Half life | 70.83 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | carrier free |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Cobalt ⁶⁰Co

RCo-3

| | |
|------------------------|---|
| Name, chemical formula | Cobalt (II) chloride, CoCl ₂ |
| Half life | 5.271 years |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 111 MBq / mg Co |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Copper ⁶⁴Cu

RCu-4

| | |
|------------------------|---|
| Name, chemical formula | Copper (II) chloride, CuCl ₂ |
| Half life | 12.701 hours |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 40 MBq / mg Cu |
| Calibration | 12 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Europium ¹⁵²Eu

REu-1

| | |
|------------------------|--|
| Name, chemical formula | Europium (III) chloride, EuCl ₃ |
| Half life | 13.522 years |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 100 MBq / mg Eu |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Europium ¹⁵²⁺¹⁵⁴Eu

REu-2

| | |
|------------------------|---|
| Name, chemical formula | Europium (III) chloride, EuCl ₃ |
| Half life | ¹⁵² Eu: 13.522 years; ¹⁵⁴ Eu: 8.601 years |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% (¹⁵² Eu + ¹⁵⁴ Eu) |
| Specific activity | ¹⁵² Eu > 100 MBq / mg Eu; ¹⁵⁴ Eu > 20 MBq / mg Eu |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Gold ¹⁹⁸Au

RAu-2

| | |
|------------------------|---|
| Name, chemical formula | Tetrachloroauric (III) acid, HAuCl ₄ |
| Half life | 2.694 days |
| Form | 3 M HCl solution |
| Radionuclidic purity | > 90.0% |
| Specific activity | > 150 MBq / mg Au |
| Calibration | 12 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Holmium ¹⁶⁶Ho

RHo-2

| | |
|------------------------|-------------------------------------|
| Name, chemical formula | Holmium chloride, HoCl ₃ |
| Half life | 26.795 hours |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 150 MBq / mg Ho |
| Calibration | 24 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Iodine ¹³¹I

RI-10

| | |
|------------------------|--------------------------------|
| Name, chemical formula | Sodium iodide, NaI |
| Half life | 8.0233 days |
| Form | solution in carbonate buffer |
| Radionuclidic purity | > 99.9% |
| Specific activity | > 400 GBq / mg I, carrier free |
| Radiochemical purity | > 97.0% |
| pH | > 8.5 |
| Calibration | 8 days |
| Expiration | 14 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Indium ^{114m}In

RIn-2

| | |
|------------------------|--|
| Name, chemical formula | Indium (III) chloride, InCl ₃ |
| Half life | 49.51 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 10 MBq / mg In |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~7 weeks advanced order |

Iron ⁵⁵Fe

RFe-3

| | |
|------------------------|--|
| Name, chemical formula | Iron (III) chloride, FeCl ₃ |
| Half life | 2.741 years |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 100 MBq / mg Fe |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Iron ⁵⁹Fe

RFe-4

| | |
|------------------------|--|
| Name, chemical formula | Iron (III) chloride, FeCl ₃ |
| Half life | 44.495 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 74.0 MBq / mg Fe |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Iron ⁵⁹Fe

RFe-6

| | |
|------------------------|---|
| Name, chemical formula | Iron (III) citrate, FeC ₆ H ₅ O ₇ |
| Half life | 44.495 days |
| Form | 0.15 M Na ₃ C ₆ H ₅ O ₇ |
| Radionuclidic purity | > 99.9% |
| Specific activity | > 74.0 MBq / mg Fe |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~4 weeks advanced order |

Iridium ¹⁹²Ir

RIr-2

| | |
|------------------------|--|
| Name, chemical formula | Ammonium hexachloroiridate (VI), (NH ₄) ₂ IrCl ₆ |
| Half life | 73.83 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 740 MBq / mg Ir |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Lanthanum ¹⁴⁰La

RLa-2

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Lanthanum chloride, LaCl ₃ |
| Half life | 1.678 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 40 MBq / mg La |
| Calibration | 24 hours |
| Expiration | 72 hours |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Lutetium ¹⁷⁷Lu

RLu-3

| | |
|------------------------|--------------------------------------|
| Name, chemical formula | Lutetium chloride, LuCl ₃ |
| Half life | 6.647 days |
| Form | 0.05 M HCl solution |
| Radionuclidic purity | > 99.9% |
| Specific activity | > 370 GBq / mg Lu |
| Calibration | 48 hours |
| Expiration | 7 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~3 weeks advanced order |

Neodymium ¹⁴⁷Nd

RNd-2

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Neodymium chloride, NdCl ₃ |
| Half life | 10.98 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 90.0% |
| Specific activity | > 1 MBq / mg Nd |
| Calibration | 5 days |
| Expiration | 12 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Phosphorus ³²P

RP-10

| | |
|------------------------|---|
| Name, chemical formula | Phosphoric (V) acid, H ₃ PO ₄ |
| Half life | 14.284 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Radiochemical purity | > 99.0% |
| Specific activity | > 8.0 TBq / mg P |
| Concentration | 0.37 ÷ 37 GBq / ml |
| pH | 2.0 -5.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Phosphorus ³²P

RP-40

| | |
|------------------------|---|
| Name, chemical formula | Phosphoric (V) acid, H ₃ PO ₄ |
| Half life | 14.284 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Radiochemical purity | > 99.0% |
| Specific activity | > 8.0 TBq / mg P |
| Concentration | > 37 GBq /ml |
| pH | 2.0 -5.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Rhenium ¹⁸⁶Re

RRe-2

| | |
|------------------------|---|
| Name, chemical formula | Potassium perrhenate (VII), KReO ₄ |
| Half life | 3.7186 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 100 MBq / mg Re |
| pH | 6.0 – 8.0 |
| Calibration | 48 hours |
| Expiration | 4 days |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Rubidium ⁸⁶Rb

RRb-2

| | |
|------------------------|-------------------------|
| Name, chemical formula | Rubidium chloride, RbCl |
| Half life | 18.64 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 10 MBq / mg Rb |
| pH | 6.0 – 8.0 |
| Calibration | 7 days |
| Expiration | 14 days |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Samarium ¹⁵³Sm

RSm-2

| | |
|------------------------|--|
| Name, chemical formula | Samarium (III) chloride, SmCl ₃ |
| Half life | 1.928 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 5 GBq / mg Sm |
| Calibration | 24 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Scandium ⁴⁶Sc

RSc-2

| | |
|------------------------|--------------------------------------|
| Name, chemical formula | Scandium chloride, ScCl ₃ |
| Half life | 83.788 days |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 50 MBq / mg Sc |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~3 weeks advanced order |

Selenium ⁷⁵Se

RSe-2

| | |
|------------------------|--|
| Name, chemical formula | Sodium selenite (IV), Na ₂ SeO ₃ |
| Half life | 119.79 days |
| Form | aqueous solution |
| Radionuclidic purity | > 98.0% |
| Specific activity | > 400 MBq / mg Se |
| pH | 7.0 – 9.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | ~3 weeks advanced order |

Silver ^{110m}Ag

RAg-2

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Silver nitrate (V), AgNO ₃ |
| Half life | 249.78 days |
| Form | 0.1 M HNO ₃ solution |
| Radionuclidic purity | > 98.0% |
| Specific activity | > 20 MBq / mg Ag |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Sodium ²⁴Na

RNa-2

| | |
|------------------------|-----------------------|
| Name, chemical formula | Sodium chloride, NaCl |
| Half life | 14.957 hours |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 10 MBq / mg Na |
| Calibration | 24 hours |
| Expiration | 48 hours |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Strontium ⁸⁵Sr

RSr-2

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Strontium chloride, SrCl ₂ |
| Half life | 64.85 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 40 MBq / mg Sr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Strontium ⁸⁹Sr

RSr-1

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Strontium chloride, SrCl ₂ |
| Half life | 50.57 days |
| Form | in 1M HCL |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 5 GBq / mg Sr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Strontium ⁹⁰Sr

RSr-3

| | |
|------------------------|---------------------------------------|
| Name, chemical formula | Strontium chloride, SrCl ₂ |
| Half life | 28.79 years |
| Form | 1 M HCl solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 1.85 GBq / mg Sr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Strontium ⁹⁰Sr

RSr-4

| | |
|------------------------|--|
| Name, chemical formula | Strontium nitrate (V), Sr(NO ₃) ₂ |
| Half life | 28.79 years |
| Form | 1 M HNO ₃ solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | > 1.85 GBq / mg Sr |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Sulphur ³⁵S

RS-3

| | |
|------------------------|---|
| Name, chemical formula | Sulphuric (VI) acid, H ₂ SO ₄ |
| Half life | 87.32 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | carrier free |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Sulphur ³⁵S

RS-4

| | |
|------------------------|---|
| Name, chemical formula | Sodium sulphate (VI), Na ₂ SO ₄ |
| Half life | 87.32 days |
| Form | aqueous solution |
| Radionuclidic purity | > 99.5% |
| Specific activity | carrier free |
| pH | 6.0 – 8.0 |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Terbium ¹⁶⁰Tb

RTb-2

| | |
|------------------------|---|
| Name, chemical formula | Terbium (III) chloride, TbCl ₃ |
| Half life | 72.3 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 90.0% |
| Specific activity | > 100 MBq / mg Tb |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Thallium ²⁰⁴Tl

RTI-2

| | |
|------------------------|---|
| Name, chemical formula | Thallium (III) sulphate (VI), Tl ₂ (SO ₄) ₃ |
| Half life | 3.788 years |
| Form | 2 M H ₂ SO ₄ |
| Radionuclidic purity | >99.5% |
| Specific activity | > 5 MBq / mg Tl |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Thulium ¹⁷⁰Tm

RTm-2

| | |
|------------------------|---|
| Name, chemical formula | Thulium (III) chloride, TmCl ₃ |
| Half life | 127.8 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 100 MBq / mg Tm |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Tin ¹¹³Sn

RSn-2

| | |
|------------------------|--------------------------------------|
| Name, chemical formula | Tin (IV) chloride, SnCl ₄ |
| Half life | 115.09 days |
| Form | 6 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 40 MBq / mg Sn |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | from stock |

Tungsten ¹⁸⁸W

RW-1

| | |
|------------------------|--|
| Name, chemical formula | Sodium tungstate (VI), Na ₂ WO ₄ |
| Half life | 69.78 days |
| Form | 0.2 M NaOH, solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 50 GBq / g W |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C÷25°C |
| Availability | on request |

Ytterbium ¹⁶⁹Yb

RYb-2

| | |
|------------------------|---|
| Name, chemical formula | Ytterbium (III) chloride, YbCl ₃ |
| Half life | 32.018 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 95.0% |
| Specific activity | > 4 GBq / mg Yb |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Yttrium ⁹⁰Y

RY-1

| | |
|------------------------|--|
| Name, chemical formula | Yttrium chloride. YCl ₃ |
| Half life | 2.6708 days |
| Form | 0.05 M HCl solution |
| Radionuclidic purity | > 99.0%, 2.5 x 10 ⁻⁴ % ⁹⁰ Sr |
| Specific activity | carrier free |
| Calibration | 3, 4 and 6 days |
| Expiration | 7 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | on request |

Zinc ⁶⁵Zn

RZn-2

| | |
|------------------------|----------------------------------|
| Name, chemical formula | Zinc chloride, ZnCl ₂ |
| Half life | 244.01 days |
| Form | 0.1 M HCl solution |
| Radionuclidic purity | > 99.0% |
| Specific activity | > 20 MBq / mg Zn |
| Calibration | 7 days |
| Expiration | 28 days |
| Storage conditions | 15°C ÷ 25°C |
| Availability | from stock |

Half-time values acc. to LABORATOIRE NATIONAL HENRI BECQUEREL, HALF-LIVES, Table of recommended values, February 2005



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