

Multimodal Sources



ISOTOPE PRODUCTS LABORATORIES
Gd-153
100 μ Ci
3.7 MBq
1 Mar 10
1414-58-18
RADIOACTIVE MATERIAL

ISOTOPE PRODUCTS LABORATORIES
Na-22
10 μ Ci
370 kBq
1 Mar 10
1414-60-7
RADIOACTIVE MATERIAL

ISOTOPE PRODUCTS LABORATORIES
Na-22
10 μ Ci
370 kBq
1 Mar 10
1414-50-7
RADIOACTIVE MATERIAL



ISOTOPE PRODUCTS LABORATORIES
Na-22
100 μ Ci
3.7 MBq
1 Mar 10
1414-40-2
RADIOACTIVE MATERIAL

Sources for Multimodal Imaging

Eckert & Ziegler Isotope Products offers a range of multimodal sources for hybrid PET/CT and SPECT/CT imaging. These sources can be used as fiducial markers to improve image coregistration in sequential scans with standalone scanners of different modalities, or for anatomical or position marking with visibility in both images of a hybrid scanner. CT targets in the clinical sources are designed to mimic cortical bone density with 120 kVp x-rays, and the MMS04 pre-clinical fiducial marker has an active element with density optimized for visibility at 50 kVp without artifacts. The new model MMS10 source even adds MRI visibility to the portfolio, as the only sealed-source fiducial marker available anywhere with visibility in three modalities. Have a specialized application? Many of these designs can be customized – contact a customer service representative to design your own fiducial marker.

Model MMS01 Specifications

Capsule: 1" x 0.25" (D x H)
white Delrin

Active dimensions: 1mm x 1mm
cylinder

Suggested usage:
High-resolution PET point source or
fiducial marker.

Model MMS02 Specifications

Capsule: 1" x 0.25" (D x H)
clear cast acrylic

Active dimensions:
1.5mm x 1.5mm cylinder

CT target: 1/4" OD bone-equivalent
ring (surrounds active element)

Suggested usage:
Multimodal fiducial marker for clinical
image coregistration.

Model MMS03 Specifications

Capsule: 1" x 0.25" (D x H)
clear cast acrylic with etched
crosshairs for laser alignment

Active dimensions: 1mm diameter
sphere

CT target: 2mm OD bone-equivalent
ring (surrounds active element)

Suggested usage:
Multimodal fiducial marker for
clinical image coregistration.

Model MMS04 Specifications

Capsule: 3 x 3 x 8mm
clear acrylic with Delrin plug

Active dimensions: 1 x 0.5mm
(D x H) cylinder

CT target: Active element is
CT-visible

Suggested usage:
Multimodal fiducial marker for
image coregistration, recommended
for small animal studies or other situations
where a small source capsule is needed.

Model MMS06 Specifications

Capsule: 1" x 0.25" (D x H)
clear cast acrylic

Active dimensions: 0.25mm
diameter sphere

Suggested usage:
High-resolution point source or spot
marker for use with scanners with
resolution better than 3mm.

Model MMS09 Specifications

Capsule: 1 x 1 x 1 cm cast acrylic
cube

Active dimensions: 0.25mm sphere
centered in capsule

Suggested usage:
NEMA NU4 resolution testing.

Model MMS10 Specifications

Capsule: 0.5" (12.7mm) dia x 0.23"
(5.8mm) thick cast acrylic

Active element: .315" (8mm) dia gel
with CT contrast MR/CT/radionuclide
trimodal fiducial marker

Suggested usage:
For clinical imaging only. Not recommended
for high-resolution preclinical
scanners.



Model MMS11 Specifications

Capsule: 0.157" (4mm) dia x 2.06" (52.3mm) long cast acrylic rod with threaded end

Active dimensions: 1mm dia x 0.5mm T

Nuclide: Na-22, 20 uCi (740 kBq)

Suggested usage:

Dedicated source for Siemens Inveon Scanner

Model MMS12 Specifications

Capsule: 1.75" OD x 2.36"L, polycarbonate hollow cylinder, with 4 imbedded point sources.

Active dimensions: 0.5mm dia x 1mm thick point, 4 places

Suggested usage:

Dedicated source for Siemens Inveon Scanner

Model MMS13 Specifications

Capsule: 1.75" OD x 2.36"L, polycarbonate hollow cylinder, with 4 imbedded point sources.

Active dimensions: 0.5mm dia x 1mm thick point, 4 places

Suggested usage:

Dedicated source for Siemens Inveon Scanner

Model MMS15 Specifications

Capsule: 0.63" OD x 1.49"L, polycarbonate hollow cylinder, with 4 imbedded point sources.

Active dimensions: 0.5mm dia x 1mm thick point 4 places

Suggested usage:

Dedicated source for Siemens Inveon Scanner

