

# Hot Lab Package

## Nuclear Associates Model 34-801



Nuclear Medicine

Nuclear Associates has selected the following products and offers them as a complete package with great savings.

Substitutions can be made at similar savings...please call. See respective data sheets for details.



### SafeView™ Syringe Shields

Best shielding syringe shield with a window. Window is reset into offset solid tungsten barrel to prevent shine through as occurs with other designs.

**56-342** SafeView Syringe Shield, 3 cc

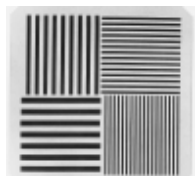
**56-343** SafeView Syringe Shield, 5 cc



### Cobalt-57 Flood Source

For accreditation and regulation requirements as transmission sources.

**67-297** Flood Source, 18.5 inch Ø, 5 mCi



### Standard Bar Phantom

Four scintiphotos measure the following camera parameters: intrinsic resolution and collimator system spatial resolution.

**76-818** Standard Bar Phantom



### Dose Calibrator Vial Source

Meets regulations for daily constancy checks over the calibrator's range of measurement.

**67-356** Calibrated <sup>137</sup>Cs Source, 200 µCi



### CAL/RAD MARK VI

Innovation abounds with this new dose calibrator featuring a touch-screen interface combined with Microsoft® Windows XP®. Automated dose-drawing calculates the correct future dose providing you and your patients with the confidence that the right dose will be delivered each and every time.

**34-165** CAL/RAD MARK VI



### Forceps - 10 inch

These stainless steel forceps are excellent for handling small items in the hot lab. Use the inverse square law to your advantage.

**04-502** Forceps - 10 inch



### Standard Table Shield

The Standard Table Shield is designed for facilities receiving unit doses or preparing diagnostic radionuclides. The L-block is constructed of 0.33 inch lead shielding and features a 2 mm lead glass window.

**56-630** Standard Table Shield



### Shielded Syringe Carrier

This carrier provides a convenient, safe means of storing and transporting syringes or vials.

**56-288** Shielded Syringe Carrier



### Dual Container Sharps Shield

A waste disposal system ideal for any location where injections are given.

**67-360** Dual Container Sharps Shield



### Lead-Lined Waste Container

This rugged container safely holds radioactive waste awaiting disposal. It consists of a lead-lined inner container and an outer receptacle made entirely of stainless steel.

**53-370** Lead-Lined Waste Container



### Survey and Count Rate Meter

The Victoreen® Model 190 Survey and Count Rate Meter is an easy-to-use instrument designed to meet the high technology requirements. Visual indication of selected parameters, as well as measured values, are displayed on the analog/digital display.

**190** Survey and Count Rate Meter



### GM Pancake Probe

GM Pancake Probe is a hand-held, thin-window detector designed for alpha, beta, and gamma radiation measurements. It is designed for use in conjunction with the Victoreen Model 190, standard GM survey meter.

**489-110D** GM Pancake Probe



### CAL/RAD Wiper™ Multi-Channel Analyzer Single-Well Wipe Test Counter

The Wiper is a compact, highly sophisticated, 4096 channel analyzer specifically developed for wipe testing in a nuclear medicine setting.

**05-500** CAL/RAD Wiper Wipe Test Counter



### Radiation Warning Materials

Essential to every lab.

**09-637** "Caution: Radioactive Materials," steel sign (1)

**09-647** "Caution: Radiation Area," steel sign (1)

**09-122** "Radioactive Material," paper tape, roll, 180 ft (1)



### Rad-Con™ Decontaminants

Foaming action rapidly "lifts" all types of radioactive contamination from work areas and skin.

**03-301** Rad-Con Surface Cleaner

*For international orders, Radi-Clean Decontaminant will be provided.*

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 516.870.0100, 888.466.8257, or fax: 516.870.0140; located at 120 Andrews Road, Hicksville, NY 11801 USA.

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# Nuclear Medicine Sources

## Model 65-101 to 67-369

- NIST traceable
- Verified for uniformity, they surpass requirements for establishing the proper uniformity response of SPECT cameras
- Configured and packaged to ensure easy handling and storage
- Sealed source designs are approved and listed with the US Nuclear Regulatory Commission-administered National Registry of Sealed Sources and Devices, and are registered with the US Food and Drug Administration's Center for Devices and Radiological Health
- Every source over 100  $\mu$ Ci includes a leak test certificate

Since 1966 Nuclear Associates has been dedicated to supplying the nuclear medicine marketplace with reliable, technologically-advanced quality control instruments and accessories. At Nuclear Associates, we take quality control seriously. If you have questions about any of our products, call toll-free in the USA 888.466.8257, or 516.870.0100 and our dedicated staff of customer service personnel and product managers will do everything they can to give you the answers you need.



As always, we stress the importance of a regular and thorough quality control program, for the benefit of both medical personnel and patients. Following a daily nuclear instrument calibration program results in improved data accuracy and optimizes results. It has been demonstrated that improved quality control results in images that contain the maximum diagnostic information. Quality control testing also makes compliance with regulatory requirements easier. The Nuclear Associates line of flood sources, calibrated well counter sources and marker sources can help you get the most from your quality control program.

### How to order radioactive sources

**No regulated radioactive sources can be shipped without compliance with these requirements:**

A photocopy of your NRC or Agreement State License must accompany orders for radioactive sources and must clearly indicate your authority to possess the source being ordered.

When you purchase a new Flood Source, you will receive (at your request, only) packaging and instructions for the proper disposal of your old Flood Source. This is a service that applies to Flood Sources packaged for delivery in the continental US only. (This service may be discontinued without notice.)

Attenuation correction line sources				
65-101	GE Medical PET ADVANCE	Ge-68	10.8 mCi	400 MBq
65-102	GE Medical PET ADVANCE	Ge-68	1.62 mCi	60 MBq
65-103	Picker PRISM 3000 XP STEP	Co-57	20 mCi	740 MBq
65-104	Picker PRISM 3000 XP STEP	Gd-153	60 mCi	2220 MBq
65-105	Picker PRISM 2000 XP STEP	Gd-153	800 mCi	29.6 GBq
65-108	SMV DST	Gd-153	323 mCi	11.95 GBq
65-110	Trionix Triad XLT20	Gd-153	300 mCi	11.1 GBq
65-106	Siemens ECAT 951/31	Ge-68	2.8 mCi	103.6 MBq
65-107	Siemens ECAT EXACT 47	Ge-68	3 mCi	111 MBq
65-109	Siemens E.CAM	Gd-153	20 mCi	0.74 GBq

## Sealed sources

Cobalt-57 flood sources					
Model	Config.	Active dimensions	Overall dimensions	Activity mCi	Activity MBq
67-243	Circular	14 in (35.6 cm)	16 in (40.6 cm)	5 mCi	185 MBq
67-295	Circular	14 in (35.6 cm)	16 in (40.6 cm)	10 mCi	370 MBq
67-297	Circular	18.5 in (47 cm)	20.5 in (52 cm)	5 mCi	185 MBq
67-298	Circular	18.5 in (47 cm)	20.5 in (52 cm)	10 mCi	370 MBq
67-297-2350	Circular	20 in (50.8 cm)	22 in (55.9 cm)	5 mCi	185 MBq
67-298-2350	Circular	20 in (50.8 cm)	22 in (55.9 cm)	10 mCi	370 MBq
67-291-2400	Circular	24 in (61 cm)	26 in (66 cm)	5 mCi	185 MBq
67-292-2400	Circular	24 in (61 cm)	26 in (66 cm)	10 mCi	370 MBq
67-277-5000	Rectangular	17.50 x 12 in (44.5 x 30.5 cm)	19.50 in x 14 in (49.5 x 35.6 cm)	5 mCi	85 MBq
67-277	Rectangular	17.50 x 12 in (44.5 x 30.5 cm)	19.50 in x 14 in (49.5 x 35.6 cm)	10 mCi	370 MBq
67-277-1500	Rectangular	17.50 x 12 in (44.5 x 30.5 cm)	19.50 in x 14 in (49.5 x 35.6 cm)	15 mCi	555 MBq
67-277-2000	Rectangular	17.50 x 12 in (44.5 x 30.5 cm)	19.50 in x 14 in (49.5 x 35.6 cm)	20 mCi	740 MBq
67-278-5000	Rectangular	18 x 14 in (45.7 x 35.6 cm)	20 x 16 in (50.8 x 40.6 cm)	5 mCi	185 MBq
67-278	Rectangular	18 x 14 in (45.7 x 35.6 cm)	20 x 16 in (50.8 x 40.6 cm)	10 mCi	370 MBq
67-278-1500	Rectangular	18 x 14 in (45.7 x 35.6 cm)	20 x 16 in (50.8 x 40.6 cm)	15 mCi	555 MBq
67-278-2000	Rectangular	18 x 14 in (45.7 x 35.6 cm)	20 x 16 in (50.8 x 40.6 cm)	20 mCi	740 MBq
67-279-5000	Rectangular	22.24 x 16.73 in (56.6 x 42.5 cm)	25 in x 18.03 in (63.5 x 42.5 cm)	5 mCi	85 MBq
67-279	Rectangular	22.24 x 16.73 in (56.6 x 42.5 cm)	25 in x 18.03 in (63.5 x 42.5 cm)	10 mCi	370 MBq
67-279-1500	Rectangular	22.24 x 16.73 in (56.6 x 42.5 cm)	25 in x 18.03 in (63.5 x 42.5 cm)	15 mCi	555 MBq
67-279-2000	Rectangular	22.24 x 16.73 in (56.6 x 42.5 cm)	25 in x 18.03 in (63.5 x 42.5 cm)	20 mCi	740 MBq
67-299-5000	Rectangular	24 x 16.5 in (61 x 41.9 cm)	26 x 18.5 in (66 x 47 cm)	5 mCi	185 MBq
67-299	Rectangular	24 x 16.5 in (61 x 41.9 cm)	26 x 18.5 in (66 x 47 cm)	10 mCi	370 MBq
67-299-1500	Rectangular	24 x 16.5 in (61 x 41.9 cm)	26 x 18.5 in (66 x 47 cm)	15 mCi	555 MBq
67-299-2000	Rectangular	24 x 16.5 in (61 x 41.9 cm)	26 x 18.5 in (66 x 47 cm)	20 mCi	740 MBq
67-276-5000	Rectangular	29 x 18 in (73.7 x 45.7 cm)	31 x 20 in (78.7 x 50.8 cm)	5 mCi	185 MBq
67-276	Rectangular	29 x 18 in (73.7 x 45.7 cm)	31 x 20 in (78.7 x 50.8 cm)	10 mCi	370 MBq
67-276-1500	Rectangular	29 x 18 in (73.7 x 45.7 cm)	31 x 20 in (78.7 x 50.8 cm)	15 mCi	555 MBq
67-276-2000	Rectangular	29 x 18 in (73.7 x 45.7 cm)	31 x 20 in (78.7 x 50.8 cm)	20 mCi	740 MBq

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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Model	Nuclide	Activity mCi	Activity MBq	
Dose Calibrator Vials				
67-206	Co-57	5 mCi	185 MBq	
67-206-1000	Co-57	10 mCi	370 MBq	
67-356	Cs-137	200 µCi	7.4 MBq	
67-357	Cs-137	250 µCi	9.25 MBq	
67-369	Ba-133	250 µCi	9.25 MBq	
	Co-57	5 mCi	185 MBq	
	Cs-137	250 µCi	9.25 MBq	
	Ba-133	250 µCi	9.25 MBq	
Spot Markers				
67-288	Co-57	25 µCi	0.0925 MBq	
67-289	Co-57	50 µCi	1.85 MBq	
67-287	Co-57	100 µCi	3.7 MBq	
67-286	Co-57	200 µCi	7.4 MBq	
Penpoint Markers				
67-201	Co-57	100 µCi	3.7 MBq	
67-202	Co-57	250 µCi	9.25 MBq	
Flexible Marker				
67-283	Co-57	150 µCi	5.55 MBq	
Flexible Rulers				
67-231	Co-57	230 µCi	8.5 MBq	
67-232	Co-57	460 µCi	17 MBq	
Rigid Ruler				
67-229	Co-57	160 µCi	5.9 MBq	
Gamma Test Tube Standards				
67-365	Ba-133	Cd-109	100 nCi	3.7 kBq
	Co-57	Co-60	per nuclide	per nuclide
	Cs-137	Mn-54		
	Na-22			
67-366	Ba-133	Cd-109	1 µCi	37 kBq
	Co-57	Co-80	per nuclide	per nuclide
	Cs-137	Mn-54		
	Na-22			
67-366-1000	Cs-137	1 µCi	37 kBq	
67-365-1000	Cs-137	100 nCi	3.7 kBq	
Well Counter Rod Standards				
Standard size: 2.95 inch long by 0.5 inch Ø				
67-100	Ba-133	Cd-109	100 nCi	3.7 kBq
	Co-57	Co-60	per nuclide	per nuclide
	Cs-137	Mn-54		
	Na-22			
67-101	Ba-133	Cd-109	1 µCi	37 kBq
	Co-57	Co-60	per nuclide	
	Cs-137	Mn-54		
	Na-22			
67-137	Co-57	100 nCi	3.7 kBq	
67-136-3000	Co-57	1 µCi	37 kBq	
67-139-3000	Cs-137	100 nCi	3.7 kBq	
67-135-3000	Cs-137	1 µCi	37 kBq	
Standard size: 5 inch long by 0.5 inch Ø				
67-139	Cs-137	100 nCi	3.7 kBq	
67-136	Co-57	1 µCi	37 kBq	
67-137-5000	Co-57	100 nCi	3.7 kBq	
67-135	Cs-137	1 µCi	37 kBq	
Flood Source Storage Option				
89-299	Universal flood source storage case with wheels			
89-291-2400	Flood source storage case for 24 inch Ø source			

# Tech-Mark Reusable Shielded Marker\*

## Model 67-631

- The only nuclear medicine marker with a shutter mechanism designed to interrupt radiation, thus protecting the patient and technologist
- Produces sharply defined images
- Allows easy marking of small patient structures
- Integral shielding protects both the diagnostician and the patient from unnecessary radiation exposure, before and after imaging
- Radiation source can be instantly and easily "interrupted" at any time
- Reduces department costs associated with radioactive materials and their disposal
- Cost-effectively priced; allows a facility or lab to have several markers for use with different nuclide studies
- Not limited to one energy or radionuclide
- Reusable and refillable; the marker doesn't have to be replaced because of nuclide decay

### Specifications

**Material** Metal, with an easy-to-grip plastic coating

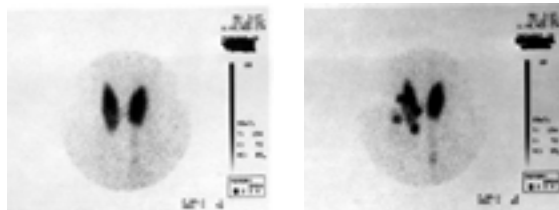
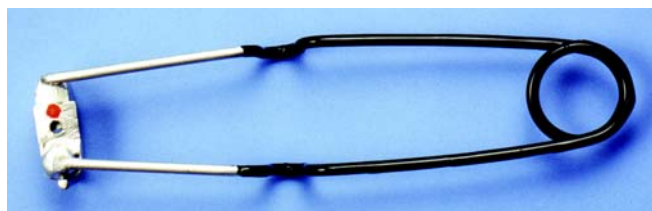
**Dimensions** 7 x 2.2 in (18.5 x 5.5 cm)

**Weight** 0.16 lb (0.076 kg)

#### Available model(s)

**67-631** Tech-Mark Reusable Shielded Marker

*Quantity discounts available*



Images showing the use of the marker to outline a cold nodule in the lower pole of the right lobe of the thyroid. The left image illustrates an area of decreased activity in the lower pole. This palpable nodule was then marked as illustrated in the right image with four separate edges of the nodule

Localized radioactive marker sources are frequently used to identify body structures, orient the image to the patient, and establish the size of lesions and other relevant features.

### Problem. . .

Until now, a safe, effective marker source had not been available; other markers are not shielded and have constant radiation output. As a result, the technologist and the patient are exposed to the radiation source or nuclide, while the marker is positioned prior to imaging.

### Problem solved. . .

The Tech-Mark Reusable Shielded Marker eliminates the hazards and inconvenience presented by other commercially available markers.

### How it works. . .

The Tech-Mark Reusable Shielded Marker consists of an isotope chamber located in a small lead-shielded chamber that can hold up to 0.2 ml of radionuclide solution. When loaded with the radionuclide to be imaged, the shielded chamber effectively prevents the release of significant ionizing radiation. (The shielding is designed for energy less than 200 keV.) The bottom of the chamber contains a felt absorber to help prevent spillage.

To unshield the marker, simply squeeze the handle, thus aligning the shutter with the aperture. Upon release of the handle, the shutter automatically closes.

### Allows easy, cost-effective refilling. . .

Because the marker does not have to be replaced due to nuclide decay, the activity in the chamber can be renewed by simply aspirating the contents before installing a new marker dose. Spillage from the shielded chamber is easily prevented by simply placing tape over the surface of the chamber aperture. The radioactive tracer in the marker can be replaced daily if  $^{99m}\text{Tc}$  is used in the marker.

\* US Patent No. 5,986,275. Developed by Dr. Charles D. Teates; Licensed by the University of Virginia Patent Foundation.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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