

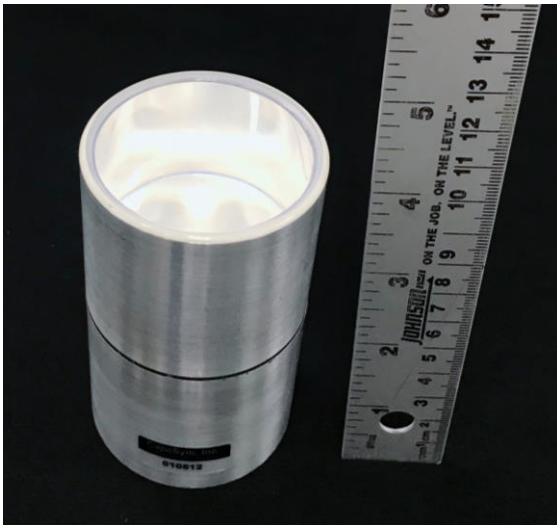


## ScintiClear™ Sensors

CapeSym's **ScintiClear™** is a new high-performance  $\text{SrI}_2(\text{Eu})$ -based scintillator made in the USA. Our proprietary crystal growth process improves its inherently excellent properties, and limits the negative effects of Eu self-absorption. Guaranteed energy resolution of ScintiClear sensors is  $\leq 3.3\%$  at 662 keV. With 4.6 g/cc density,  $49 Z_{\text{eff}} = 49$ , and emission peaking at 430nm ScintiClear sensors are an excellent choice for all kind of applications.\*

	<b>SC-25x25</b>	<b>SC-38x38</b>	<b>SC-51x51</b>
Crystal size, mm <sup>3</sup>	Ø25.4x25.4 (12.9 cc)	Ø38.1x38.1 (43.4 cc)	Ø50.8x50.8 (103.0 cc)
Package size, mm <sup>3</sup>	Ø34.5 x 31.0	Ø47.3 x 44.0	Ø59.0 x 58.5
ER % at 662keV	$\leq 3.3$		
Gamma sensitivity, cps/uR/h at 662keV	2.8	7.6	15.3
Internal activity, cps	<0.5	<2	<5

Other sizes from 12.7mm<sup>3</sup> cubes to Ø76.2x76.2mm<sup>3</sup> cylinders are available.



Ø50.8x101.6 mm<sup>3</sup> ScintiClear sensor

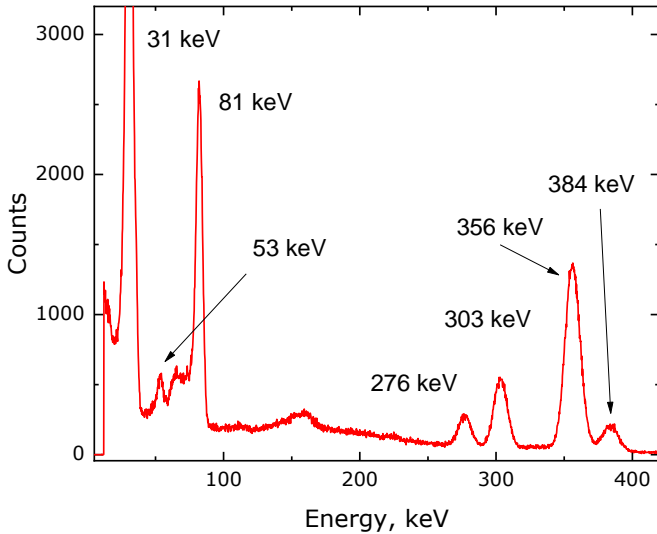
Strontium Iodide has a naturally stable isotopic composition, ScintiClear crystals enjoy the lowest intrinsic activity among high energy resolution scintillators available on the market.

CapeSym's proprietary crystal growth process is now routinely producing crystals up to Ø76.2 and 127 mm long. The patent-pending process is based on decades of experience in crystal growth and crystal growth process simulation.

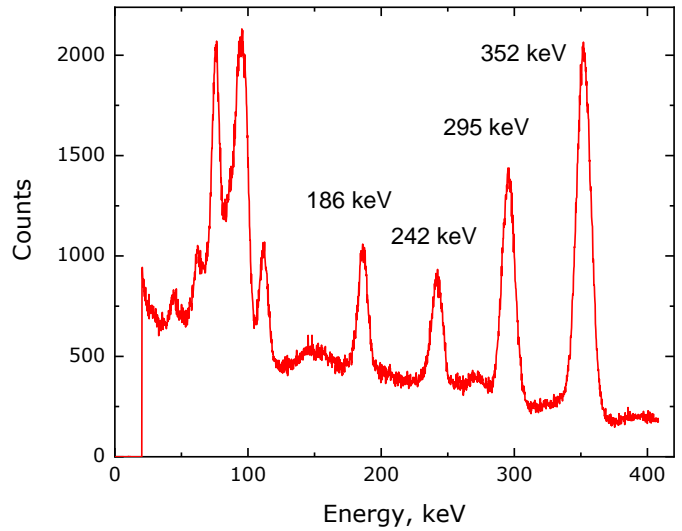
\*We encourage you to take a look at ScintiClear detector solutions (CapeSym packed crystals with photosensors) to ensure the best possible performance of your system.

# Unambiguous Identification with ScintiClear™

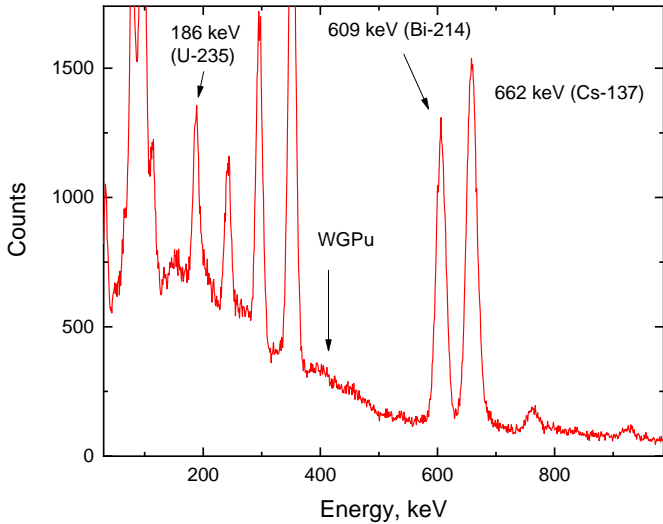
Ba-133 radioactive source



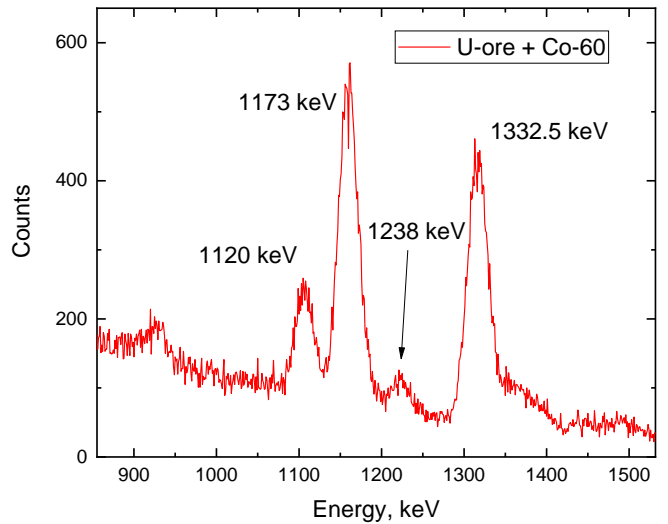
U-ore environmental sample



U-ore environmental sample + Cs-137



U-ore environmental sample + Co-60



Critical situations demand immediate and accurate identification of the radiological material present. **ScintiClear™** easily separates low energy Ba-133 peaks as well as the  $^{137}\text{Cs}$  and  $^{134}\text{Cs}$  lines (662 keV and 605 keV respectively) and eases the task of identifying the 186 keV line (HEU) and 414 keV line (WGPu) even in the presence of interfering radionuclides. **ScintiClear™** also offers high energy resolution in the MeV range, and no internal activity. These attributes, combined with good linearity, high density and  $Z_{\text{eff}}$  enable clear identification of 1001 keV line (DU) and high energy environmental peaks.