Email : sales@scilabexport.com
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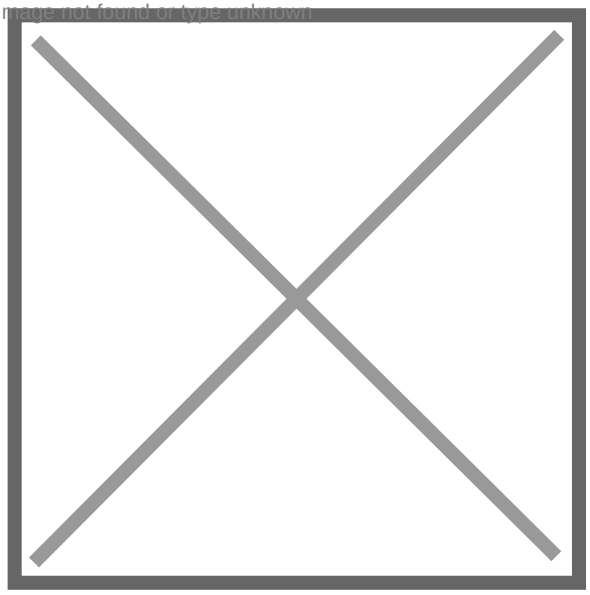
Product Name :

Apparatus for studying the value of the half-decay period during radioactive decay

Product Code :

SCL-201/052

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Description :

Apparatus for studying the value of the half-decay period during radioactive decay(Product Code: SCL-201/052) is a half-life simulation kit used to model the random nature ofradioactive decay and find a half-life value in school and college physics lessons. It consists of500 small plastic cubes and a plastic cup or jar, so a class can generate its own decay datathrough repeated throws. The kit is made by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**,an OEM manufacturer, at its own factory in Ambala, India.

Specifications

Parameter	Detail
Simulation pieces	500 small cubes of plastic material
Container	Plastic cup / jar
Isotope experiment described in the listing	Half-life of Ba-137m determined using a plastic bottle with Cs-137 stored as a salt; the metastable Ba-137m produced by ?-decay is released by an elution solution
Ba-137m half-life (as stated)	2.6 minutes
Radioactive source	Not named in the contents list — discuss with us before ordering
Product code	SCL-201/052
Manufacturer	Jain Scientific Equipments Pvt Ltd (ScienceLab) — OEM
Country of origin	India (made in Ambala, Haryana)

What Is the Half-Life Apparatus Used For?

Radioactive nuclei decay at random, yet a large group halves in a fixed time. The cube model makes this visible: students shake all 500 cubes in the cup, tip them out, and remove every cube that lands on a chosen face (mark one face on each cube first if the cubes are plain). Each removed cube stands for a decayed nucleus. Repeating the throw with the remaining cubes and plotting the count against throw number produces an exponential decay curve, and the number of throws needed to halve the count is the half-life of the model.

The listing also describes the classic isotope experiment in which Ba-137m, eluted from a Cs-137 source, is measured with a half-life of 2.6 minutes. The cube activity prepares students to read such real count-rate data. As nuclear physics lab equipment, the simulation can be run by any class, whereas any work with a radioactive source requires qualified supervision and compliance with national rules, so please discuss that part with us first.

What to Specify When Ordering

- Number of kits: one per student group, or one per class if results will be pooled.
- Whether you are also enquiring about the Ba-137m isotope experiment, so we can advise
-

OEM

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