Email : sales@scilabexport.com
Phone: +91-7082934803

Product Name :

Protactinium Generator

Product Code :

SLE/PHY/41



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Description :

Protactinium Generator (Product Code: SLE/PHY/41) is a sealed, leak-proof container of material from the uranium-238 decay series used to observe radioactive decay and measure a half-life in school and college physics laboratories. Teachers choose it because the protactinium-234 it yields has a half-life of about 70 seconds, so a complete decay curve can be recorded within one practical — a staple of nuclear physics lab equipment. It is supplied by **Jain Scientific Equipments Pvt Ltd (ScienceLab)**, Ambala, India.

Specifications

Parameter	Detail
Isotope studied	Protactinium-234, a product of the uranium-238 decay series
Half-life of protactinium-234	About 70 seconds
Container	Sealed container with leak-proof closure
Main use	Observation of radioactive decay and half-life measurement
Product code	SLE/PHY/41
Supplied by	Jain Scientific Equipments Pvt Ltd (ScienceLab), Ambala, India

What Is the Protactinium Generator Used For?

The Protactinium Generator is used for the classic half-life practical, in which the count rate from protactinium-234 is recorded at regular intervals and plotted against time. With a half-life of about 70 seconds, the count rate falls clearly within a few minutes, so students can read the half-life straight from their decay graph or from a log plot of count rate.

In a typical radiation experiment, a Geiger–Müller tube connected to a counter is placed close to the container, a background count is taken first, and counts are then recorded over short fixed intervals with the background subtracted. Keep the container closed at all times, handle it for the shortest time needed, and return it to a labelled, locked radioactive-materials store after the lesson.

Supplier

Jain Scientific Equipments Private Limited, which trades as ScienceLab, supplies the Protactinium Generator to schools, colleges and institutions from Ambala, Haryana, India. The company sources this item for buyers and can combine it with detectors and counters from its physics range in one quotation. More about the company is on our profile page.

Related Physics Lab Equipment

A half-life practical with the Protactinium Generator needs a detector and a counter; these items complete the set-up: