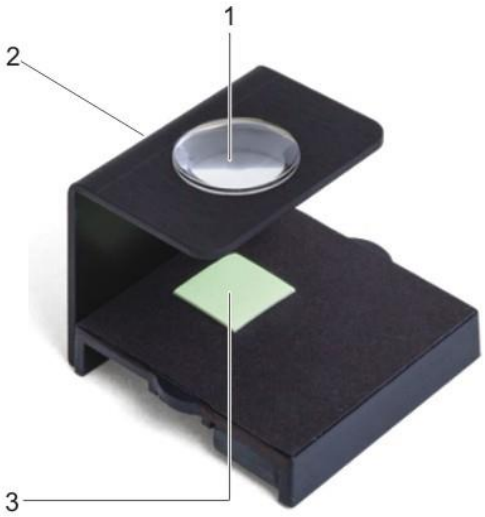
Spinthariscope 1000918

Instruction sheet

09/15 SP/ALF



1 Magnifying lens
2 Mounting for radiation cartridge
3 Fluorescent screen

1. Safety instructions

- In experiments with radioactive substances, observe the regulations that currently apply for the region (e.g., radiation protection regulations).
- Mount the radiation cartridge in the instrument so that the side from which the radiation emerges is facing down towards the exposed zinc sulphide screen.

2. Description

The spinthariscope allows scintillations produced on an exposed zinc sulphide screen by radiation from radioactive decay to be observed.

Looking through the magnifying lens in a completely darkened room allows the randomly spaced flashes of light caused by radioactive decay to be viewed.

3. Technical data

Fluorescent screen:	zinc sulphide
Dimension screen	approx. 15 x 15 mm²
Weight:	approx. 35 g

4. Operation

Additionally required:

Radiation Cartridge, ^{226}Ra, 3,7 kBq 1006797

- Screw the radiation cartridge into the holder in such a way that the radiation-emitting side (the flat side) faces down towards the fluorescent screen.
- Darken the room and wait until your eyes have adjusted to the darkness.
- Look through the lens and observe the fluorescent screen.

If you hold a piece of paper in the path of the radiation, the fluorescent screen will appear completely dark, as the α–particles cannot pass through the paper.