

Isotope Safety Kit Instruction

-ensure safe handling of radioactive isotopes

Regular inspections and control of workplaces and laboratories are important to ensure a contamination free and safe environment for the employees at the laboratory. Danish National Institute for Radioactive Hygiene recommends that this procedure is carried out frequently. The test can be carried out for both ^{14}C and ^3H .

The Isotope Safety Kit components

- ◆ 20 filters
- ◆ 20 plastic vials inclusive lid
- ◆ 1 set of gloves
- ◆ Isotope Safety Kit instruction

Other material required

- ◆ Demineralised water to be added on to the filter by a wash bottle or a coarse pipette
- ◆ Paper for note taking.



Procedure

- 1 Start by noting where the samples should be taken; eg right/left side of the fume hood
 - 2 Put on your gloves
 - 3 Take one filter and moisten it with 2-3 drops of demineralised water; place the filter in a plastic vial and tighten the lid. This sample serves as a blank for treatment handling
 - 4 For samples from the isotope working area: take one filter and moisten it with 2-3 drops of demineralised water. Rub the filter hard back and forth in an area of approx 5 cm² 4-5 times within the area which needs to be monitored
 - 5 Place the filter in a plastic vial and tighten the lid. Note the number on the lid and make sure that the number corresponds to the work location
 - 6 The procedure is repeated until the entire isotope working area or the area in which the potential contamination may occur is covered. Remember also to cover the nonvisible surfaces, eg edges on the inner side of the fume hood
- Important! Only one filter per vial**
- 8 Ship the vials with the filters to: DHI, Agern Alle 5, 2970 Hørsholm, Denmark. The vials can be shipped as regular mail. At DHI scintillation cocktail will be added to the vials and they will be counted. DHI is authorised by DANAK (the Danish Accreditation and Metrology Fund) to carry out accredited measurements of ^{14}C radioactivity
 - 9 The result of the filter counting will be returned within 7 working days.
- NB The kit price does not include the price for counting of sample. Please check our website for prices.

Visit our website www.labproducts.dhigroup.com for more information