

## **Effect of including soil on the concentrations of elements in solution (comparison of percolation using aspirator and cyclone separation)**

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### **Abstract**

Soil included in solution effects a change in the concentrations of elements in it. Standard soil was included in ion-exchange water and they were mixed. The mixed solution was divided in three tubes. The mixed solution in one tube was stirred with a mixer. After then, a part of it was dropped rapidly by a pipette and dried on a backing film for PIXE target. Each mixed solution in other each tube was percolated using an aspirator and was separated using a cyclone separator. After then, they are prepared for PIXE targets. The concentrations of elements in solution are different from each other according to using preparing method. It is necessary for PIXE of solution mixed soil to use the relevant preparing method for PIXE target.