

Sodium Peroxide fusion using the PHOENIX I

Summary of Procedure:

The PHOENIX 12000I is designed to prepare materials by sodium peroxides fusion. It does it safely and efficiently...

XRF Scientific preferred fusion procedure:

Using the XRF Scientific Zirconium flanged crucibles have a diameter of 35mm, height 32mm and volume 25mL.

Fuse 0.25g of sample with 4g of sodium peroxide using the PHOENIX 12000I.

25mL of distilled water into 250mL TP beaker, place crucible into beaker and allow reaction to cease, slowly add 15mL concentrated Hydrochloric acid then rinse and remove crucible, add drop wise hydrogen peroxide (15%) until solution clears, finally place beaker on a hotplate, bring to boil, continue boiling for two minutes. Cool and transfer to a volumetric flask - final volume to be determined by your ICP-OES system.

PT INCO Notes:

1. To achieve the through put required, we recommend that 12 x 3 (36) zirconium flanged crucibles are need to be operating in parallel.
2. We can also supply the 36, 250ml TP beakers, the rotary shaker and rakes (3 rakes to hold 6 beakers each.)
3. We assume that you have the volumetric flasks.

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