Colorful Balloons

Purpose

To illustrate the colors associated with various metal salts with a colorful balloon explosion.

Materials

Balloon H₂ Gas

Funnel String

Petri Dish Candle on a stick

Methanol Matches

Chloride or Nitrate Salt of Li, Sr, Cu,

Ba, K or Na

Procedure

- 1. Place a small amount of salt in petri dish
- 2. Mix salt with Methanol
- 3. Place funnel in balloon opening, and add the Methanol/salt solution to balloon
- 4. Being sure not to spill the solution, fill balloon with H₂ gas
- 5. Tie off balloon and attach to string
- 6. Light candle on the stick and carefully bring to the base of balloon. The balloon will pop, igniting the H₂ and the Methanol solution which will produce a colored fiery explosion

Additional Information

1. Colors of the salts will be as follows: Sodium – yellow, Lithium - red, Strontium - red, Copper - blue/green, Potassium – pale violet, Barium – yellow/green.

Disposal

Pieces from the balloons can be thrown into the trash.