## How to Use and Clean Crucibles

Crucibles represent one of the most valuable - and expensive - pieces of laboratory equipment. These specialized containers withstand extreme temperatures to hold metals, glass, and pigments during furnace melting processes. Common laboratory crucibles include boron nitride crucibles, pyrolytic boron nitride crucibles, and other high-temperature variants. After experiments, proper maintenance becomes critical to preserve the crucible's surface integrity and ensure repeated usage. Effective cleaning and storage techniques can significantly extend the service life of these precision tools while maintaining their performance characteristics.



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### Introduction

Cleaning chemicals from ceramic crucibles is relatively easy. Therefore, ceramic crucibles are usually preferred for lab men. You will only need a few basic chemicals and supplies to do that.

Matériaux	Outils
potassium bicarbonate (solid form)	
Étape 1 - Scrape off residue	

 $Gently\ scrape\ as\ much\ residue\ left\ from\ the\ materials\ used\ in\ your\ experiment\ from\ the\ crucible.$ 

## Étape 2 - Pour in potassium bicarbonate (solid)

Fill your ceramic crucible with fused potassium bicarbonate (solid form). You should have enough bicarbonate in the crucible to past above the line of the remaining material from your experiments. If you need to fill the entire crucible, do so.

# Étape 3 - Heat

Place the crucible on a burner. Heat the crucible until the fused bicarbonate melts. Heat it until a layer of red potassium salt appears on the surface. Using a mixing rod, stir the melt a few times. The entire melting procedure should take about one minute.

# Étape 4 - Pour out melt

Remove your crucible from the flame. Pour out the melt.

# Étape 5 - Rinse and dry the surface

Rinse the crucible in hot water. Use a clean cloth to dry the surface. If your crucible is platinum, use alumina-impregnated nylon webbing to complete cleaning the surface. Let the crucible cool. For other notes, please refer to: Usage and Maintenance of Different Crucibles