

## Mass Data and Observations of Epsom Salts

Observations of hydrated $\text{MgSO}_4$	
Mass of crucible and lid	
Mass of crucible, lid, and hydrated $\text{MgSO}_4$	
Mass of hydrated $\text{MgSO}_4$	
Mass of crucible, lid, and anhydrous $\text{MgSO}_4$	
Mass of anhydrous $\text{MgSO}_4$	
Mass of water in hydrated $\text{MgSO}_4$	
Moles of anhydrous $\text{MgSO}_4$	
Moles of water in hydrated $\text{MgSO}_4$	
Observation of anhydrous $\text{MgSO}_4$	

## Procedure

1. Measure to the nearest 0.01 g the mass of a clean, dry crucible with a lid. Record the mass.
2. Add about 3 g hydrated  $\text{MgSO}_4$  to the crucible. Measure the mass of the crucible, lid, and hydrate to the nearest 0.01 g and record the mass.
3. Record your observations of the hydrate.
4. Place the triangle on the ring of the ring stand. Carefully place the crucible in the triangle.
5. Place the crucible lid on the crucible slightly cocked to help prevent spattering and allow vapor to escape. Begin heating with a low flame, then gradually progress to a stronger flame. Heat for about 10 minutes.
6. When heating is complete, remove the crucible using tongs. Place the lid on the crucible and allow the crucible and contents to cool.
7. Measure the mass of the crucible, lid, and  $\text{MgSO}_4$  and record the mass in the data table.
8. Observe the anhydrous  $\text{MgSO}_4$  and record your observations.

## Cleanup and Disposal

1. Discard the anhydrous  $\text{MgSO}_4$  in a trash container or as directed by your teacher.
2. Return all lab equipment to its proper place and clean your lab station.
3. Wash your hands thoroughly when all lab work and cleanup are complete.