



Don't say that you have not seen an active volcano!

Volcano on the table

Purpose : To observe the volcano-like reaction of $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ with ethyl alcohol.

Materials :

- Solid $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$
- Ethyl alcohol
- Bunsen burner or a heat source



Procedure : Solid $(\text{NH}_4)_2\text{Cr}_2\text{O}_7$ is put on a dish. A volcano shape is given to the orange-colored solid. A small paper, which is wetted by ethyl alcohol, is put into the center and it is ignited. A rapid reaction is observed till the dichromate finishes. If you switch off the light you can be impressed with the view of the erupting volcano.

Reactions :



Conclusion : Alcohol passes the heat to dichromate and ammonium dichromate decomposes to dark colored chromium (III) oxide by an exothermic reaction. The reaction occurs as a volcano eruption.