

CHEMISTRY

Lab 5: Enthalpy Change of Dissolution

You are given four ionic compounds:

I. Sodium chloride (NaCl)

II. Sodium hydroxide (NaOH)

III. Ammonium nitrate (NH₄NO₃)

IV. Sodium thiosulphate pentahydrate (Na₂S₂O₃·5H₂O)

1. Weigh out 5.00 g of the ionic compound
2. Pour 50.00 cm³ of deionized water into a plastic beaker and note its temperature
3. Add the compound into the beaker, stir and measure the maximum or minimum temperature reached
4. Repeat with the other compounds
5. Record the results in a table
6. In each case calculate the enthalpy change of dissolution of the compound stating whether it is endothermic or exothermic