

**Marks**  
**4**

- The general formula for a nickel(II) chloride compound complexed with ammonia is  $[\text{Ni}(\text{NH}_3)_x]\text{Cl}_2$ . A 0.59 g sample of the salt was dissolved in water and the ammonia from it was titrated with 153 mL of 0.100 M HCl. What is the value of the coefficient  $x$ ?

Answer: