Preparation and Dilution of Percentage Solution

1. **Preparation of a Specific Percentage Solution:**

*How much sodium chloride is required to prepare 250 mL of a 5% w/v sodium chloride solution?*

1. **Dilution of a Stock Solution:**

*How many millilitres of a 20% w/v benzyl benzoate solution are required to prepare 100 mL of a 5% w/v solution?*

1. **Final Volume After Dilution:**

*You have 40 mL of a 10% w/v solution. To what final volume should it be diluted to obtain a 2% w/v solution?*

1. **Strength After Dilution:**

*If 50 mL of a 12% v/v alcohol solution is diluted to 200 mL with water, what will be the final percentage strength?*