

**4.5 Net ionic equations – No driving force for reaction = no reaction****Subject:** Chemical reactions, net ionic equations**Description:** Two chemicals are mixed together resulting in no reaction.**Materials:**0.1 M Sodium hydroxide, NaOH<sup>‡</sup>0.1 M Potassium acetate (KCH<sub>3</sub>CO<sub>2</sub>)<sup>‡</sup>

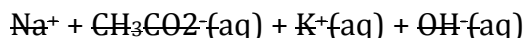
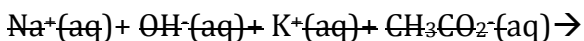
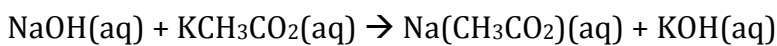
2 100 mL beakers

1 250 mL beaker

<sup>‡</sup> Sodium hydroxide is located in the cabinet under the hood. 0.1 M Potassium acetate is located in the solutions cabinet.

**Procedure:**

1. Pour the individual solutions into labeled 100 mL beakers.
2. Pour both beaker solutions into the 250 mL beaker.
3. Observe that no reaction takes place.

**Discussion:**

All ions are soluble and are spectator ions. Therefore no reaction takes place.

**Safety:** None**Disposal:** Check that the solution is between pH 2 and 12. It can be flushed down the drain with water.**References:**

1. Prof. Botch