

## Iodine Clock Reaction

Safety: Wear safety glasses and gloves. Sulfuric acid is a strong acid and can damage skin, eyes, and clothing. The solutions used are dilute, but still avoid skin contact. Iodine can discolor skin and clothing. Discard solutions into the waste beaker under the hood after use.

This experiment involves the reaction of potassium iodate ( $\text{KIO}_3$ ) and sodium sulfite ( $\text{Na}_2\text{SO}_3$ ) in a solution with sulfuric acid ( $\text{H}_2\text{SO}_4$ ) to produce iodine ( $\text{I}_2$ ). The iodine reacts with starch to produce a color change. The effect of concentration changes and temperature changes on the reaction rate will be investigated.