**Experiment name :** p-Iodoaniline

**Classification:** Aromatic electrophilic substition reactions (SEAr)

**Reaction scheme:**



**Experimental procedure and purification technique:**

Into a beaker, provided with a mechanical stirrer, place aniline (2.3 g, 2.4 ml; 25 mmol), sodium hydrogen carbonate (3.5 g) and water (20 ml); cool to 12-15 °C by the addition of a little crushed ice. Stir the mixture, and introduce iodine (6.3 g) in small portions. Continue stirring for 20-30 minutes, by which time the colour of the free iodine in the solution has practically disappeared and the reaction is complete. Filter the crude p-iodoaniline with suction on a Buchner funnel, drain as completely as possible and dry it in the air. Place the crude product in a 100 ml round­bottomed flask fitted with a reflux condenser, add petroleum ether (20 ml) and heat in a water bath maintained at 75-80 °C. Shake the flask frequently and after about 15 minutes, slowly decant the clear hot solution into a beaker set in a freezing mixture of ice and salt, and stir constantly. The p-iodoaniline crystallises almost immediately in almost colourless needles; filter and dry the crystals in the air. m.p.: 62-63 °C, predicted yield: 3.75 g (68%).

Reference source (1): “Vogel’s Textbook of Practical Organic Chemistry (5th edition)”: 909.

Reference source (2): “Denel Organik Kimya (6th edition)”: 496.