

Experimental section example

3.0 g cyclohexanol and 1 mL concentrated phosphoric acid were placed in a 5-mL vial, with a boiling chip. A Hickman-Hinkle still head was attached, and the mixture was distilled at temperatures between 90° and 105°. The distillate was washed twice with 1-mL portions of 5% sodium carbonate, and dried over calcium chloride. The resulting liquid was distilled (b.p. 83-85°, lit. 83°^{ref}) to give 0.90 g (37%) of a clear, colorless liquid. The product gave a positive bromine test.

Cookbooked example

3.0 g cyclohexanol and 1 mL concentrated phosphoric acid were placed in a 5-mL vial, with a boiling chip. A Hickman-Hinkle still head was attached, and the mixture was heated on a hot plate until cyclohexene distilled at temperatures between 90° and 105°. The distillate was removed from the still head and placed in a 3-mL vial, where it was washed twice with 1-mL portions of 5% sodium carbonate. The aqueous layers were removed and the product was dried over calcium chloride. The product was removed from the calcium chloride and distilled at temperatures between 83-85° (lit. 83°^{ref}). The clear, colorless liquid was removed from the still head and weighed. It weighed 0.90 g (37%). The product was treated with a bromine solution. The bromine color vanished, indicating a positive bromine test.