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Sodium Biphenyl,

$C_{12}H_9Na$ 176.19—Available as a solution in 2-ethoxyethyl ether, or in 1,2-dimethoxyethane (diethylene glycol diether).

• **ACTIVITY:** Place 20 mL of dry toluene in a titration flask equipped with a magnetic stirring bar and a stopper having a hole through which the delivery tip of a weight buret may be inserted. Add a quantity of sodium biphenyl sufficient to produce a blue color in the mixture, and titrate with amyl alcohol, contained in a weight buret, to the disappearance of the blue color. (Disregard the amounts of sodium biphenyl and amyl alcohol used in this adjustment.) Weigh accurately the weight buret containing the amyl alcohol. Transfer the contents of a vial of well-mixed test specimen to the titration flask, and titrate quickly with the amyl alcohol to the disappearance of the blue color. Weigh the buret to determine the weight of amyl alcohol consumed, and calculate the activity, in mEq/vial, by the formula:

$$\text{Result} = 11.25W$$

in which W is the weight of amyl alcohol consumed. NLT 10% activity is found.

• **IODINE CONTENT:** Add 10 mL to 5 mL of toluene contained in a 125-mL separator fitted with a suitable inert plastic stopcock, and shake vigorously for 2 min. Extract gently with three 10-mL portions of dilute phosphoric acid (1 in 3), combining the lower phases in a 125-mL iodine flask. Add sodium hypochlorite TS, dropwise, to the combined extracts until the solution turns brown, then add 0.5 mL in excess. Shake intermittently for 3 min, add 5 mL of freshly prepared, saturated phenol solution, mix, and allow to stand for 1 min, accurately timed. Add 1 g of potassium iodide, shake for 30 s, add 3 mL of starch TS, and titrate with 0.1 N sodium thiosulfate VS: NMT 0.1 mL of 0.1 N sodium thiosulfate is consumed.

[NOTE—A suitable grade is available as catalog number 277134 from www.sigma-aldrich.com or as catalog number 54101 from www.gfschemicals.com.]

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
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