

2-(Pyrazin-2-yliminomethyl)phenol

Abdullah Mohamed Asiri *

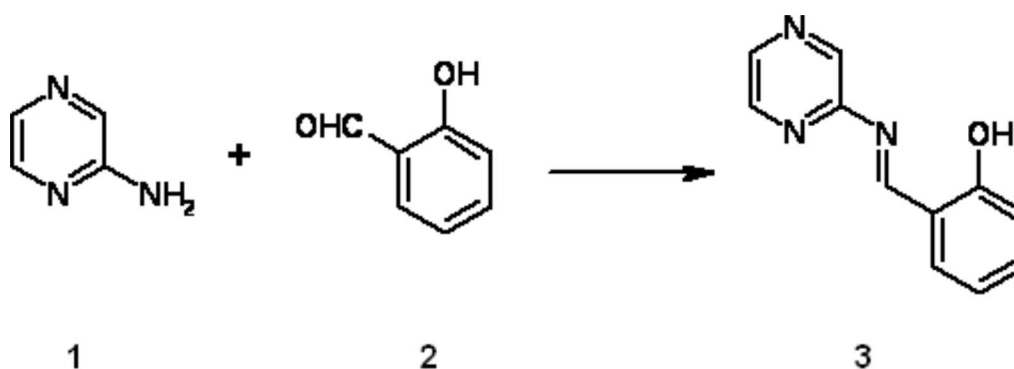
Chemistry Department, Faculty of Science, King Abdul-Aziz University, Jeddah 21413, P.O. Box 9028, Saudi Arabia

* Author to whom correspondence should be addressed. Tel: +966-2-6952293; Fax: +966-2-6952293; E-mail: aasiri2@kaau.edu.sa

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Schiff bases from 2-hydroxy-1-naphthaldehyde have often been used as chelating ligands in the field coordination chemistry [1]. The Schiff base compounds can be classified by their photochromic and thermochromic characteristics [2].



A solution of 2-aminopyrazine **1** (5.0g, 0.052 mol) and 2-hydroxybenzaldehyde aldehyde **2** (6.97g, 0.052 mol) in absolute ethanol (100 mL) was heated under reflux for 3 hrs. Cooling the mixture, filtering the precipitate and recrystallization from ethanol gave the Schiff base **3** as yellow crystals (3.72g, 33.97%).

Melting Point: 96-98°C (EtOH).

IR (KBr, cm^{-1}): 1594.9 (C=N), 1470 (C=C) and 1191.9 (C-N).

^1H NMR (400MHz; CDCl_3) δ , ppm: 12.67 (s, 1H, OH), 8.80 (s, 1H, CH olefinic), 8.67 (d, 1H, CH aromatic), 8.51 (s, 1H, CH aromatic), 8.50 (d, 1H, CH aromatic), 7.69 (d, 1H, CH aromatic), 7.27 (dd, 1H, CH aromatic), 6.92 (d, 1H, CH aromatic), 6.84 (dd, 1H, CH aromatic).

Elemental Analysis: Calculated for $\text{C}_{11}\text{H}_9\text{N}_3\text{O}$ (199.21): C, 66.32%; H 4.55%; N, 21.09 %. Found: C, 66.05%; H, 4.43 %; N, 21.14 %.

References:

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