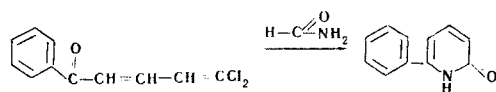


NEW ROUTE TO THE SYNTHESIS OF 2-PYRIDONES

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In a study of the properties of dichloropentadienyl ketones we found that they form the corresponding 2-pyridone derivatives under the conditions of the Leuckart-Wallach reductive amination.



Thus 6-phenyl-2-pyridone with mp 196-197° (from benzene) (mp 197° [1]) was synthesized in 57% yield by heating 11 mmole of 1,1-dichloro-5-phenyl-1,3-pentadien-5-one with 56 mmole of formamide and 22 mmole of sodium bicarbonate at 160-170° for 6 h. Found %: C 77.17; H 5.25; N 8.35. $C_{11}H_9NO$. Calculated %: C 77.17; H 5.30; N 8.18. Similarly (by heating at 160-170° for 4.5 h), 6-(3,4-dimethoxyphenyl)-2-pyridone with mp 189-190° (from acetone) was obtained from 1,1-dichloro-5-(3,4-dimethoxyphenyl)-1,3-pentadien-5-one. Found %: C 67.00; H 5.50; N 6.02. $C_{13}H_{13}NO_3$. Calculated %: C 67.52; H 5.66; N 6.06. The synthesized compounds do not depress the melting points of samples of pyridones obtained from the appropriate 2-pyrones [2].

LITERATURE CITED

1. J. A. Zebe, Ber., **29**, 1673 (1896).
2. Yu. V. Maevskii and S. V. Sokolovskaya, Khim. Geterotsikl. Soedin. (1971) (in press).

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