Nachbargruppenbeteiligung bei der Dehydrierung cyclischer Amine
vom Typ o-substituierter Anilinderivate

Neighbourgroup Participation with the Dehydrogenation of Cyclic Amines of the
o-Substituted Aniline Type

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The 2-Aminobenzylalcohols 1a - c produced with mercury-edta dehydrogenation the lac-
tams 6a - c; the pipecoline 2b yielded the benzoxazine 3b indicating the participation of the
nucleophilic hydroxymethyl group. The 2-aminobenzaldehydes showed a different behaviour
in dependence on the ring size of the amine part: 7a, b led – via intermediate reaction of the
hemiaminal 9 with the electrophilic formyl function – to the lactams 11a, b, while 7c gave rise to
the aminoaldehyde 12 as major product and similarly the pipecoline 15 to the aminoketone 16.
From 2'-(4-morpholinyl)-acetophenone (22) were received the lactam 31 and the aminoethanol
32, both by a twofold dehydrogenation.

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