

Catalytic Synthesis of 1,3-Propylenediamines

K. V. Yakovlev^a, D. V. Petrov^a, V. A. Dokichev^a, and Yu. V. Tomilov^b

^a*Institute of Organic Chemistry, Ufa Scientific Center, Russian Academy of Sciences,
Ufa, 450054 Russia*

e-mail: dokichev@anrb.ru

^b*Zelinskii Institute of Organic Chemistry, Russian Academy of Sciences, Moscow*

Received February 17, 2010

Abstract—The hydrogenation on Raney nickel of 3-alkenyl-substituted pyrazolines and also of 3-methyl-5-(2-furyl)-1*H*-pyrazoline and 3,3'-bipyrazoline afforded substituted 1,3-diaminobutanes, 1,3-diaminopentanes, 1,3-diaminohexane, and 1,3,4,6-tetraaminohexane. Under the same conditions from 3-acetyl-4-(2-furyl)-1*H*-pyrazoline 3-amino-2-methyl-4-(2-furyl)pyrrolidine was obtained.

DOI: 10.1134/S1070428011020035