Synthesis and Aminolysis of *N*-(4-Chlorophenyl)- and *N*-(2,4-Dichlorophenylsulfonyl)-*N*-(glycidyl)bicyclo-[2.2.1]hept-5-en-*endo*-ylmethylamines

L. I. Kas'yan[a], S. A. Prid'ma[a], V. A.Pal'chikov[a], A. O. Kas'yan[b], A. V. Turov[c], A. V. Tokar'[a], and S. V. Tret'yakov[a]

[a]*Oles' Gonchar Dnepropetrovsk National University, Dnepropetrovsk, 49010 Ukraine*
e-mail: palchikoff@mail.ru
[b]*ProBioGen A.G., D-13086, Berlin, Germany*
[c]*Shevchenko Kiev National University, Kiev, Ukraine*

Received December 21, 2009

Abstract—A glycidyl fragment was introduced into molecules of derivatives of bicyclo[2.2.1]hept-5-en-*endo*-2-ylmethylamine (sulfonamides, sulfonylurea) under the conditions of phase-transfer catalysis; carboxamides were established to be passive in this reaction; the results were compared with the calculations of the proton affinity of the nitrogen atoms in the molecules of the acyl derivatives of the framework amine. Products were obtained from reactions of *N*-(4-chlorophenylsulfonyl)-*N*-(glycidyl)bicyclo[2.2.1]hept-5-en-*endo*-2-ylmethylamine with benzylamine, N-benzylpiperazine, and bicyclic framework amines. The regiochemistry of the aminolysis was investiganted with the help of NMR ^{1}H, ^{13}C spectra, and also with the use of 2D spectra COSY, NOESY, HMQC, HMBC.

DOI: 10.1134/S1070428010050064