

UGI BISAMIDES BASED ON PYRROLYL- β -CHLOROVINYLLALDEHYDE AND THEIR UNUSUAL TRANSFORMATIONS

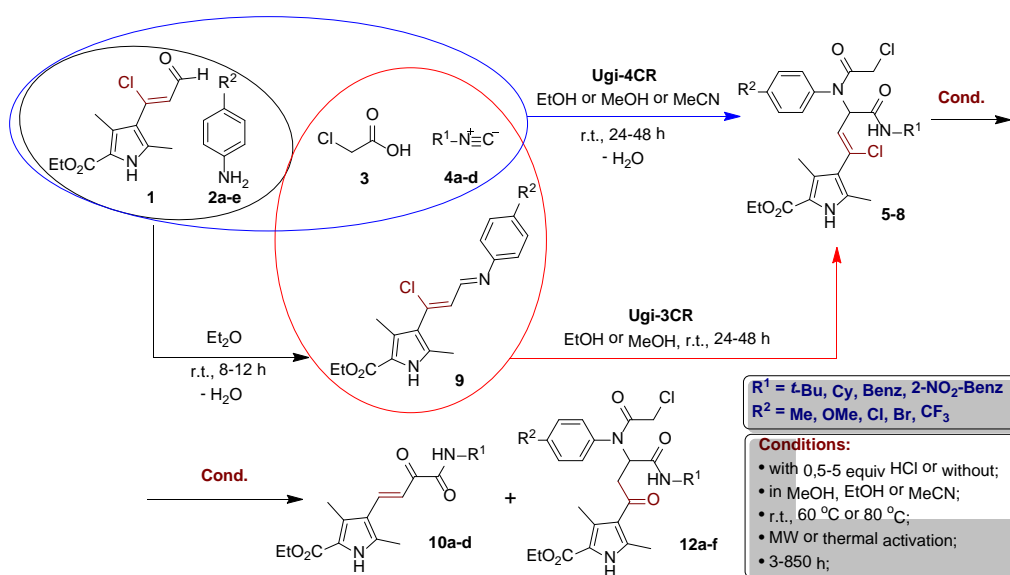
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Among the multicomponent processes, the four-component Ugi reaction (Ugi-4CR) is characterized by the greatest versatility, the variability of the starting components and the variety of possible products. The use of additional functionalized reagents in the Ugi reaction makes it possible to complicate the structure of the products, also due to possible *post*-transformations. The synthesis of the target Ugi bisamides **5-8** was carried out at room temperature in ethanol with stirring for 24-48 hours (depending on the type of starting material) with a yield of 54-93% (Scheme 1). It was found that the application of the Ugi-3CR approach had no significant effect on the yields of the target products.



Attempt to apply a well-documented conversion isocyanide moiety of Ugi bisamides proceeded in an unexpected manner: β -chlorovinyl fragment turned into a vinyl (substances **10a-d**, Scheme 1). Another direction of *post*-transformation was the replacement of the chlorine atom in the β -chlorovinyl group with a hydroxy group (substances **12a-f**).