

Synthesis and Some Transformations of (2,2-Dimethyl-4-propyltetrahydro-2*H*-pyran-4-yl)acetonitrile

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Abstract—Removal of the ethoxycarbonyl group in ethyl cyano-(2,2-dimethyl-4-propyltetrahydro-2*H*-pyran-4-yl)acetate afforded the corresponding (2,2-dimethyl-4-propyltetrahydro-2*H*-pyran-4-yl)acetonitrile. The reduction of the latter with lithium aluminum hydride furnished 2-(2,2-dimethyl-4-propyltetrahydro-2*H*-pyran-4-yl)ethanamine, which reacted with furfural and a heterocyclic ketone followed by reduction to form the secondary amines and some amides. Hydrolysis of the above nitrile resulted in the corresponding acid, which was converted in a series of amides.

Keywords: azomethines, amides, amines, azomethines reduction

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