

Alkyl Heteroaromatics as Building Blocks in Organic Synthesis: The Reactivity of Alkyl Azoles toward Electrophilic Reagents

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Oxazolone, Imidazolone, Oxazolopyridines, Pyridobenzoxazine, Thiazolone

Oxazolone (**1**) couples with aromatic diazonium salts to yield the arylhydrazones (**3a-c**). Compound **3** reacts with aniline to give aryl hydrazone (**5**). Compound **5** was also obtained *via* converting **1** into the imidazolone (**4**) and subsequent treatment of **4** with aromatic diazonium salts. Compounds **1** and **12** reacted with arylidenemalononitrile (**6**) to yield compounds **8** and **14** respectively. Also compounds **1**, **12** condensed with an aromatic aldehydes to yield **11** and **17**. Compounds **11**, **17** reacted further with one molecule of malononitrile to give compounds **8** and **14**, respectively. Compound **20** which was generated *in situ* by heating phenacylthiocyanate (**19**) in acetic anhydride on treatment with hydrazine hydrate or phenyl hydrazine gives **21** and **22** respectively. Also **20** reacted with malononitrile or with ethyl cyanoacetate to give **23** and **24**, respectively.