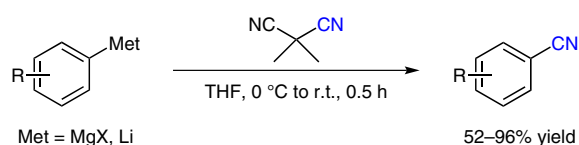


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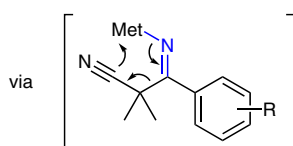
Transnitration from Dimethylmalononitrile to Aryl Grignard and Lithium Reagents: A Practical Method for Aryl Nitrile Synthesis

J. Am. Chem. Soc. **2015**, *137*, 9481–9488.

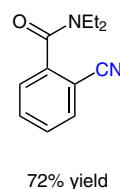
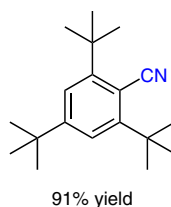
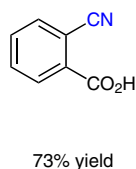
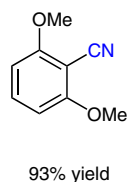
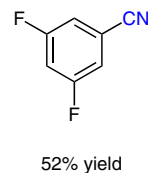
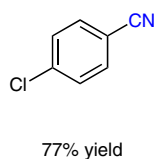
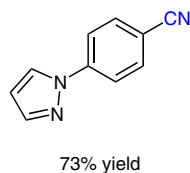
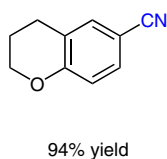
Transnitration of Grignard Reagents and Aryllithiums



R = Alk, OMe, OBn, Ph, F, Cl, Br, NMe₂, SMe, CF₃, CO₂H, C(O)N*i*-Pr₂, pyrazolyl



Selected examples:



Significance: The authors report an electrophilic cyanation of various arylmagnesium and -lithium reagents by using dimethylmalononitrile as a reagent. The transition-metal-free method proceeds under mild reaction conditions and affords the desired nitriles in high yields.

Comment: The Grignard reagents were either obtained from commercial sources or prepared in situ from the corresponding aryl iodides or bromides. Aryllithium reagents were prepared either by bromine–lithium exchange or by directed *ortho* lithiation.

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