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## Nickel-catalyzed Mizoroki-Heck cross-coupling reaction of aryl halides with styrenes

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Herein is presented an efficient and a simple protocol using 10 mol % of NiCl<sub>2</sub>·6H<sub>2</sub>O, 20 mol % of 2,3-dihydroxy naphthalene, 50 mol % of CTAB, and 2 equiv. of NaOH in 2.5 mL of DMF at 150°C for C-C bond forming Mizoroki-Heck coupling. Use of styrene and 4-methyl styrene with various aryl iodides and bromides having functionalities such as methyl, methoxy, nitro, fluoro, chloro, hydroxyl, trifluoromethyl, methyl, and methoxyaryl halide show smooth conversion with 50 to 93% isolated yield. The electron-withdrawing groups like nitro at *para*-position give a lower yield. The aryl iodides have been found to be more reactive than aryl bromides. The advantages of this protocol are moderate to excellent yield in the absence of an inert atmosphere, and the use of cheap and readily available catalyst.

**Keywords:** Mizoroki-Heck reaction, NiCl<sub>2</sub>·6H<sub>2</sub>O, 2,3-Dihydroxynaphthalene, CTAB