عنوان مقاله:

Bis[(۲-ethoxy-۲-oxoethyl)triphenyl phosphonium] di-μ-chloro-bis[bromochloro palladate (II)] and its application in Heck and Suzuki cross-coupling reactions

محل انتشار:

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خلاصه مقاله:

In this study, the phosphonium salt [Ph۳PCHC(O)OCH۲CH۳]Br undergoes a reaction with palladium(II) chloride, resulting in the formation of [Ph۳PCHC(O)OCH۲CH۳]۲[Pd۲Cl۴Br۲]. The synthesized compound underwent thorough characterization through elemental analysis, as well as FT-IR, ۱H, ۳۱P, and ۱۳C NMR spectroscopies. The investigation revealed that this particular substance serves as an efficient catalyst for the Heck cross-coupling reaction, leading to the synthesis of diverse unsaturated products with highly favorable outcomes. Moreover, it has demonstrated effectiveness in catalyzing the Suzuki cross-coupling reaction. Notably, the catalyst exhibits sustained catalytic activity and can be conveniently recovered and reused.

کلمات کلیدی:

Phosphonium salt, Palladium(II), Heck C-C coupling, Suzuki cross-coupling