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## Buchwald-Hartwig Reaction: An overview

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**Abstract:** Pd-catalyzed amination reaction of aryl halides has attracted much attention in recent years. This review underscores selected important recent developments in the catalysis of one of the kind amination reaction so-called Buchwald-Hartwig amination reaction. This development has been achieved *via* utilization of sterically hindered phosphine ancillary ligands. Our purpose here is giving information to the readers about recent advances in this strategy for the C-N bond formation, especially applied for construction of various heterocyclic systems. In this review, we also deliberate the applications of this name reaction as an important C-N cross-coupling reaction applied to the total synthesis of natural products.

**Keywords:** Pd-catalyzed, Buchwald-Hartwig amination reaction, total synthesis, natural products.

### 1. Introduction

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