

Triflamides: highly reactive, electronically activated *N*-sulfonyl amides in catalytic N–C(O) amide cross-coupling.

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Streszczenie

The direct, highly chemoselective Suzuki-Miyaura cross-coupling of trifluoromethanesulfonamides (triflamides) by selective N-C(O) amide bond cleavage is reported. This operationally simple, mild, and user-friendly method accomplishes the direct synthesis of ketones from amides by a catalytic manifold as a powerful alternative to Weinreb amides. Mechanistic studies support rotational inversion and electronic activation, favoring selective insertion under mild conditions. Our data strongly suggest that triflamides should be routinely considered as precursors in amide bond cross-coupling.

Adres publiczny

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