

Zambron, B. K.; Dubbaka, S. R. Markovic, D.; Moreno-Clavijo, E. Vogel, P. (2013). Amide Formation in One Pot from Carboxylic Acids and Amines via Carboxyl and Sulfinyl Mixed Anhydrides, *Org. Lett.*, 15 (10), pp 2550–2553

An efficient method has been developed for the preparation of yet unknown acyclic mixed anhydrides of carboxylic and sulfinic acids. Sterically hindered 2-methylbut-3-ene-2-sulfinyl carboxylates add primary and secondary amines preferentially onto the carbonyl moieties realizing a new method for the one-pot preparation of carboxamides. It uses 1:1 mixtures of carboxylic acids and amines without a base, requires no excess of reagents, and liberates only volatile coproducts. Protected di- and tripeptides have been prepared in solution without epimerization by application of this method.