

## Triazole synthesis by alkyne-azide cycloaddition using silver catalysis

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1,2,3-Triazoles were synthesized from a variety of alkyne and azides using silver compounds. Additionally to common silver salts (nitrate, sulphate, oxide and chloride), we also tried an N-heterocyclic “abnormal” complex, a derivative of a mesoionic carbene, that proved to be a better catalytic system. Good yields of the 1,2,3-triazoles were obtained, by means of an alternative methodology, avoiding side reactions, the use of additives and facilitating the purification of final products. A plausible mechanism were proposed, according to the literature.

The observed results represent a new source of potential catalysis using silver as the reactive center on the route to 1,2,3-triazoles, important heterocycles with many applications.

