

**Title: A New and Facile Procedure for Protection of Aldehydes and Ketones**

**Author(s):** Rahimizadeh, M., Shiri, A. \*, Bakavoli, M., Eshghi, H., Saberi, S.

**Address:** *Department of Chemistry, School of Sciences, Ferdowsi University, Mashhad 91775-1436, Iran.*

**E-Mail:** alishiri520@yahoo.com

The important role of protection of carbonyl compounds in multi-stage organic synthesis is evident. A lot of methods have been introduced to carry out the acetalization or ketalization [1]. Most of the researchers attempted to find a new catalyst [2] and therefore; using a new and efficient reagent have been paid less attention. Some novel methods have been published so far about the introduction of a new reagent for protection of carbonyl compounds [3-5]

Considering these facts, spiroorthocarbonates are introduced. Various derivatives of these have been synthesized, and their polymerization behaviors have been studied. They have been used as non-shrinking monomers. In this protocol, we present 3,3,9,9-tetramethyl-1,5,7,11-tetraoxaspiro[5.5]undecane (**1**) as another new and efficient reagent for acetalization and ketalization of carbonyl compounds which has several advantages. Accordingly, the spiro reagent (**1**) was prepared. This compound is stable enough to be stored for a long time. The reaction of this reagent with various aldehydes and ketons in presence of a catalytic amount of *para*-toluenesulfonic acid at room temperature gave the protected compounds. High yield, short reaction time, mild conditions, high chemoselectivity, not using protic reagents for protection, irreversibility of the reaction and stability of the reagent are the advantages of this method which can be mentioned.

**References:**

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