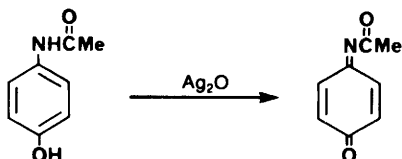




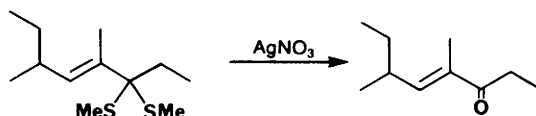
Silver In Synthesis

Many silver salts play specific roles in synthesis due to their unique, well-defined properties. A few of the many applications of silver salts in organic synthesis are the following:

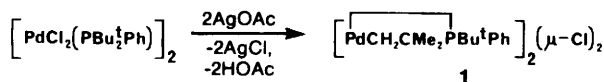
Silver(I) oxide effects the facile oxidation of acetaminophen.¹



The π -complexing ability of **silver nitrate** has been employed in the stabilization of bicyclooctadienes and bicyclooctenones;² AgNO_3 also facilitates the hydrolysis of dithioacetals.³



Silver tetrafluoroborate, acetate and other silver salts abstract/displace chloride from precious-metal complexes,^{4,5} generating intermediates such as 1.⁶



AgBF_4 (with NEt_3) generates the oxyallyl species from α -bromoketones which can then form 1,4-cycloadducts with furans to give oxygen-bridged bicyclics.⁷ AgBF_4 also assists in the palladium-promoted cycloamination of 1,3-dienes to pyrroles.⁸

AgBF_4 and AgPF_6 promote the cycloaddition of vinyl bromides to various olefins.⁹

Silver triflate¹⁰ and **silver methanesulfonate**¹¹ are convenient precursors to a number of alkyl methanesulfonate derivatives useful as alkylating agents for aromatic compounds.

Silver hexafluoroantimonate can be used to generate thiobenzoyl cations.¹²



The role of silver salts in organic processes will be reviewed in a future issue of *Aldrichimica Acta*. Act now and take advantage of our reduced prices.

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