Modern methods of organic synthesis

Science, Chemistry



Addition reactions prevent such reactions from happening because of the reduced positive charge. Therefore, it isn't acceptable to expect the compound to react through substitution reactions as these reactions are not typical for ketones. The compound is an aromatic ketone having a phenyl group directly attached to the carbonyl group; its chemical formula is C9H10O and its structural formula is COCH3C6H4CH3.

Reduction occurs either by metal hydrides such as LAH or by hydrogen; ketones are reduced to secondary alcohols. The statement in the article is arguable because reduction and not oxidation occurs with either compound yielding secondary alcohol. Catalytic hydrogenation or reduction by hydrogen is synonymous names for the same reaction; which is valid. Tollen's reagent is a reagent used to distinguish between aldehydes and ketones. Ketones do not react with the reagent which the author failed to demonstrate. P-methyl acetophenone reacts to form tertiary alcohol with ethyl magnesium bromide; this point is accurate. The compound reacts with Grignard reagent giving magnesium alkoxide which then yields the tertiary alcohol when water is added to it. All in all, p-metyacetophenone is a compound used in perfumes and its synthesis is of great importance for the chemists.