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The acidity of the hydroxy-tautomeric form of dimethylphosphite stabilized with chromium group metals

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Abstract

© 2016 Taylor & Francis Group, LLC.We have revealed that the reaction of hexacarbonylmetal(0) with the dimethylphosphite can afford the organometallic species having the hydroxyl-tautomeric form of the H-phosphonate in the metals' coordination sphere. Theoretical and experimental investigations reveal the strong acidity of these organometallic compounds aswell as their possibility to take part in electrophilic hydrophosphorylation of inactivated C=C and C≡C bonds.

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Keywords

acidity, chromium group complexes, Dimethylphosphite, hydroxy-tautomeric form