

# Tungstenmethyl-dimethylsilanols $\text{Cp}(\text{OC})_2(\text{R}_3\text{P})\text{W}-\text{CH}_2-\text{SiMe}_2\text{OH}$ ( $\text{R} = \text{Me}, \text{Ph}$ ) – Synthesis *via* Oxygenation or Hydrolysis\*

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The tungstenmethyl-dimethylsilanols  $\text{Cp}(\text{OC})_2(\text{R}_3\text{P})\text{W}-\text{CH}_2-\text{SiMe}_2\text{OH}$  [ $\text{R} = \text{Me}$  (**6a**),  $\text{Ph}$  (**6b**)] have been synthesized by oxofunctionalization of the tungstenmethyl-silanes  $\text{Cp}(\text{OC})_2(\text{R}_3\text{P})\text{W}-\text{CH}_2-\text{SiMe}_2\text{H}$  [ $\text{R} = \text{Me}$  (**3a**),  $\text{Ph}$  (**3b**)] with dimethyldioxirane. **6a** has been additionally obtained by  $\text{Et}_3\text{N}$ -assisted hydrolysis of the tungstenmethyl-chlorosilane  $\text{Cp}(\text{OC})_2(\text{Me}_3\text{P})\text{W}-\text{CH}_2-\text{SiMe}_2\text{Cl}$  (**5**). Compounds **6a,b** are stable with respect to self-condensation, but controlled condensation of **6a** with  $\text{Me}_2\text{Si}(\text{H})\text{Cl}$  in the presence of triethylamine has been realized to give the tungstenmethyl-substituted disiloxane  $\text{Cp}(\text{OC})_2(\text{Me}_3\text{P})\text{W}-\text{CH}_2-\text{SiMe}_2\text{O}-\text{SiMe}_2\text{H}$  (**7**). The new compounds have been identified IR- and NMR-spectroscopically and, in the case of **3a**, by X-ray analysis.

*Key words:* Tungsten, Silanol, Oxygenation