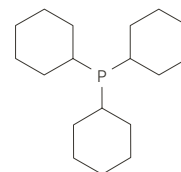


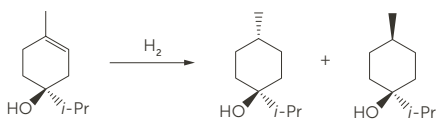
# Tricyclohexylphosphine

Product number: 907 | Alternative name: PCy<sub>3</sub> | CAS number: 2622-14-2 | C<sub>18</sub>H<sub>33</sub>P | Molecular weight: 280.43

Tricyclohexylphosphine (PCy<sub>3</sub>) is an air-sensitive white solid (m.p. 81° – 83°C [178° – 181°F]) that should be handled under inert atmosphere. PCy<sub>3</sub> has found use as an initiator/catalyst or ligand in metal-catalysts for a number of organic reactions. This summary will briefly highlight a few of the synthetic transformations that involve PCy<sub>3</sub>.

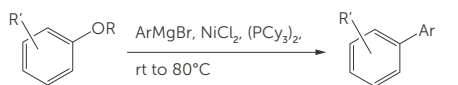


## DIRECTED HOMOGENEOUS HYDROGENATION<sup>1-3</sup>



Pd/C	20	80
Crabtree's cat.	99.9	0.1

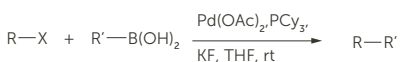
## CROSS-COUPLING OF ARYL GRIGNARDS AND ARYL ALKYL ETHERS<sup>10</sup>



R = alkyl  
40 examples

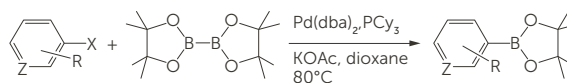
58 – 99 % yields

## SUZUKI CROSS-COUPLING (ARYL - SP<sup>2</sup>)<sup>4-7</sup>



R = aryl, alkenyl  
X = Cl, Br, I, OTf  
R' = aryl  
75 – 99% yields

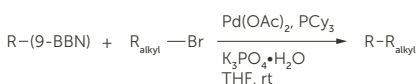
## PREPARATION OF ARYLBORONATES<sup>11</sup>



X = Cl, Br, I, OTf  
Z = C, N (meta)  
26 examples

69 – 94% yields

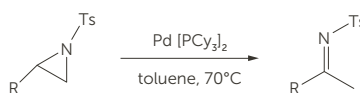
## SUZUKI CROSS-COUPLING (SP<sup>2</sup>-ALKYL)<sup>8,9</sup>



R = alkyl, vinyl  
17 examples

58 – 93% yield

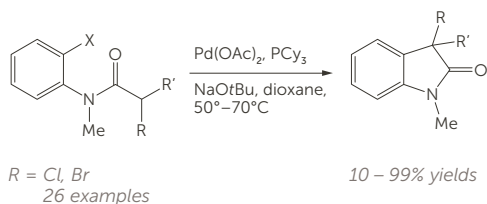
## ISOMERIZATION OF AZIRIDINES<sup>12</sup>



R = alkyl, aryl

70 – 86% yield

## SYNTHESIS OF OXINDOLES BY AMIDE $\alpha$ -ARYLATIONS



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