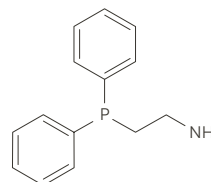


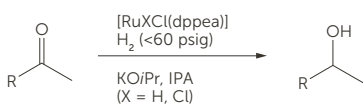
# 2-(Diphenylphosphino)ethylamine

Product number: 1442 | Alternative name: dppea | CAS number: 4848-43-5 |  $C_{14}H_{16}NP$  | Molecular weight: 229.26

2-(Diphenylphosphino)ethylamine (dppea) is a relatively air-stable colorless to slightly yellow viscous liquid (220°C [428°F] at 9 torr). Dppea can be weighed in air, but solutions of the ligand will oxidize slowly upon standing in air.



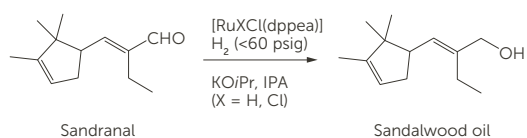
## HYDROGENATION OF KETONES <sup>1,2</sup>



$R = \text{Me, } t\text{-Bu, Ph, } -\text{CH}_2\text{CH}_2\text{CH}=\text{CH}_2, \text{C}(\text{Me})_2\text{CH}_2\text{Ph}$



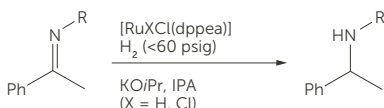
## HYDROGENATION OF ALDEHYDES <sup>1</sup>



Sandranal

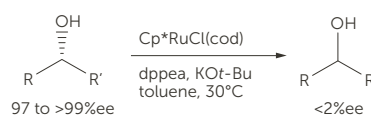
Sandalwood oil

## HYDROGENATION OF IMINES <sup>1</sup>



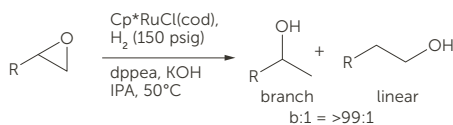
$R = \text{Ph, Bn}$

## RACEMIZATION OF CHIRAL SEC-ALCOHOLS <sup>3</sup>



$R = \text{aryl, alkyl}$   
 $R' = \text{Me, } n\text{-Pr}$   
 $R/R' = 1\text{-indanol}$

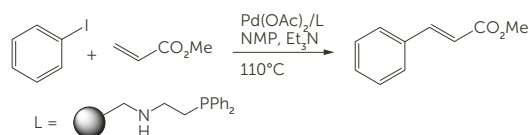
## HYDROGENOLYSIS OF EPOXIDES <sup>4</sup>



$R = \text{Ph, Bn, alkyl, alkenyl}$

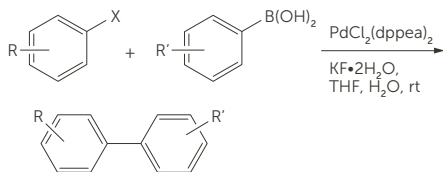
$(R = \text{Ph, } b:l = 89:11)$

## POLYMER-SUPPORTED HECK COUPLING <sup>5</sup>



>90% yield

## SUZUKI COUPLING OF ARYL BROMIDES<sup>6</sup>



R = H, F, alkyl, CO<sub>2</sub>Me

R' = H, F, alkyl  
86 – 99% yield

## References

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- <sup>2</sup> Dahlenburg, L. and Kuhnlein, C., *J. Organomet. Chem.*, **2005**, *690*, 1.
- <sup>3</sup> Ito, M., Osaku, A., Kitahara, S., Hirakawa, M., and Ikariya, T., *Tetrahedron Lett.*, **2003**, *44*, 7521.
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- <sup>5</sup> Mansour, A. and Portnoy, M., *Tetrahedron Lett.*, **2003**, *44*, 2195.
- <sup>6</sup> Guo, M., Jian, F., and He, R., *Tetrahedron Lett.*, **2006**, *47*, 2033.

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