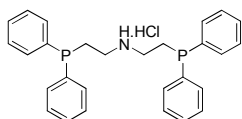
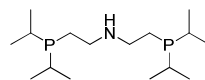




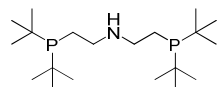
## Aminodiphosphine Ligands and Iridium Catalyst



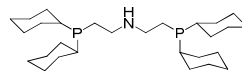
**K15-0016**  
**Bis((2-diphenylphosphino)ethyl)ammonium chloride, ≥97.0%**  
 $C_{28}H_{30}ClNP_2$ ; F.W: 477.95; [66534-97-2]



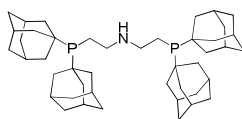
**K15-0017**  
**Bis((2-diisopropylphosphino)ethyl)ammonium chloride, ≥97.0%**  
 $C_{16}H_{37}NP_2$ ; F.W: 305.42; [131890-26-1]



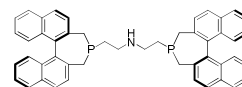
**K15-0134**  
**Bis((2-di-tert-butylphosphino)ethyl)amine, ≥97.0%**  
 $C_{20}H_{45}NP_2$ ; F.W: 361.53; [944710-34-3]



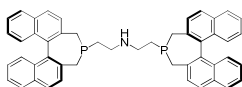
**K15-0135**  
**Bis((2-dicyclohexylphosphino)ethyl)amine, ≥97.0%**  
 $C_{28}H_{53}NP_2$ ; F.W: 465.67; [550373-32-5]



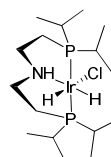
**K15-0136**  
**Bis((2-diadamantylphosphino)ethyl)amine, ≥97.0%**  
 $C_{44}H_{69}NP_2$ ; F.W: 673.97; [1086138-36-4]



**K15-0020**  
**Bis((2-((11bR)-3H-binaphtho[2,1-c:1',2'-e]-phosphepin-4(5H)-yl)ethyl)amine, ≥97.0%**  
 $C_{48}H_{41}NP_2$ ; F.W: 693.79; [851870-89-8]



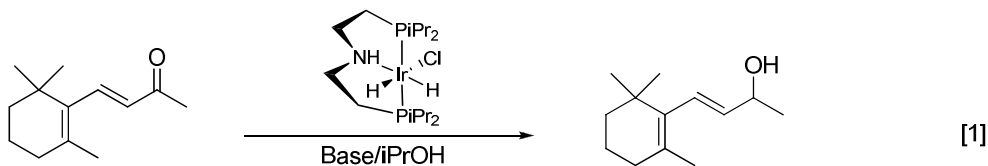
**K15-0021**  
**Bis((2-((11bS)-3H-binaphtho[2,1-c:1',2'-e]-phosphepin-4(5H)-yl)ethyl)amine, ≥97.0%**  
 $C_{48}H_{41}NP_2$ ; F.W: 693.79



**K77-0001**  
**Chlorodihydrobis((2-diisopropylphosphino)ethyl)amineiridium(III), ≥97.0%**  
 $C_{16}H_{39}ClIrNP_2$ ; F.W: 535.10; [791629-96-4]

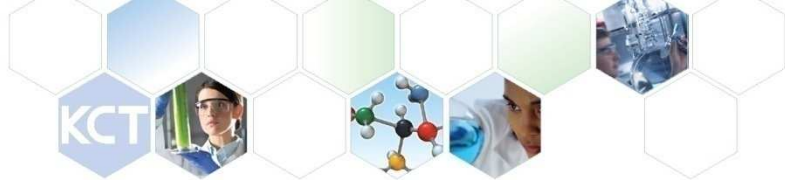
Aminodiphosphine ligands can be complexed to various transition metals generating catalytic systems with high performance for numerous transformations such as  $H_2$ -hydrogenation (reaction 1), transfer hydrogenation (reaction 2), ammonia-borane dehydrogenation (reaction 3) and the linear trimerisation of ethylene to 1-hexene (reaction 4).

### $H_2$ -Hydrogenation of Ketones:<sup>1</sup>

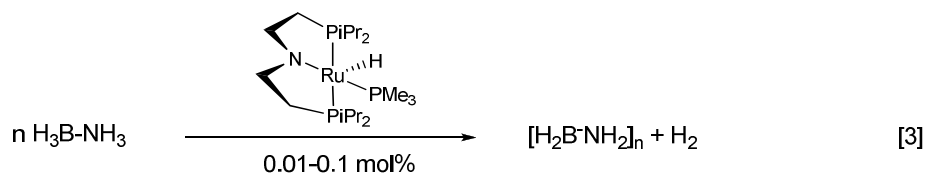


### Transfer Hydrogenation of Ketones:<sup>2</sup>

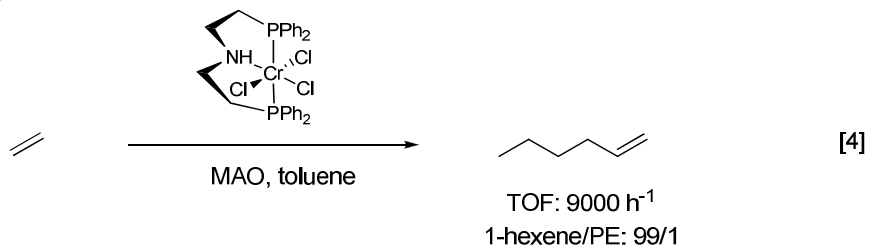




### Catalytic Dehydrogenation of Ammonia-Borane:



### Trimerisation of Ethylene:



### References

1. Chen, X. *et al. Dalton Trans.* **2009**, 1407.
2. Clarke, Z. E. *et al. Organometallics* **2006**, 25, 4113.
3. Käß, M. *et al. Angew. Chem. Int. Ed.* **2009**, 48, 905.
4. McGuinness, D. S. *et al. Chem. Commun.* **2003**, 334.