

YPhos ligand technology

novel, highly electron-
rich ylide substituted
phosphines

The YPhos ligands

Novel, highly electron-rich ylide substituted phosphines enabling unprecedented efficiency and versatility

Imagine YPhos as a master key in the world of chemistry. YPhos ligand technology is a game-changer in the field of palladium-catalyzed bond-formations, offering a variety of benefits and applications across various industries. Its role is crucial in creating complex molecules, which can be used in pharmaceuticals, materials science, and more.

Key advantages:

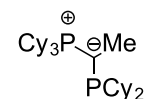
- Facile coupling of aryl halides, particularly aryl chlorides, which are typically challenging substrates for cross-coupling reactions.
- Mild reaction conditions are appropriate, which can result in improved selectivity as fewer side reactions are observed.
- High activity in C-N and C-C cross-coupling reactions.
- It allows for the coupling of organolithium, magnesium, and zinc reagents, broadening the range of possible reactions and substrates that can be used.

These advantages make YPhos ligands particularly useful for palladium-catalyzed coupling reactions. Additionally, they are suitable for a variety of applications, including the Buchwald-Hartwig amination and α -arylation of aliphatic cyclic ketones^{1-4,7}.



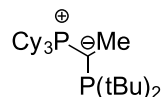
Learn more about our YPhos ligands and visit our dedicated website.

YPhos product portfolio



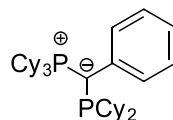
Trade name
Empirical formula
CAS no.

keYPhos
PCy₃C(Me)PCy₂
14185-94-5



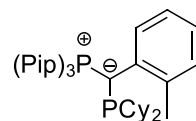
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Empirical formula
CAS no.

trYPhos
PCy₃C(Me)PtBu₂
2271302-83-9



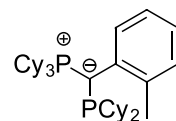
Trade name
Empirical formula
CAS no.

joYPhos
PCy₃C(Ph)PCy₂
2271302-85-1



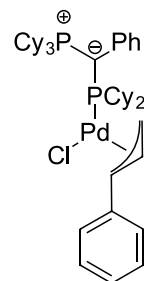
Trade name
Empirical formula

piperYPhos
PPip₃C(o-Tol)PCy₂



Trade name
Empirical formula
CAS no.

pinkYPhos
PCy₃C(o-Tol)PCy₂
2495200-15-0



Trade name
Empirical formula
CAS no.

Umicore CX512
Pd(joYPhos)(cinnamyl)Cl
2412537-46-1

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