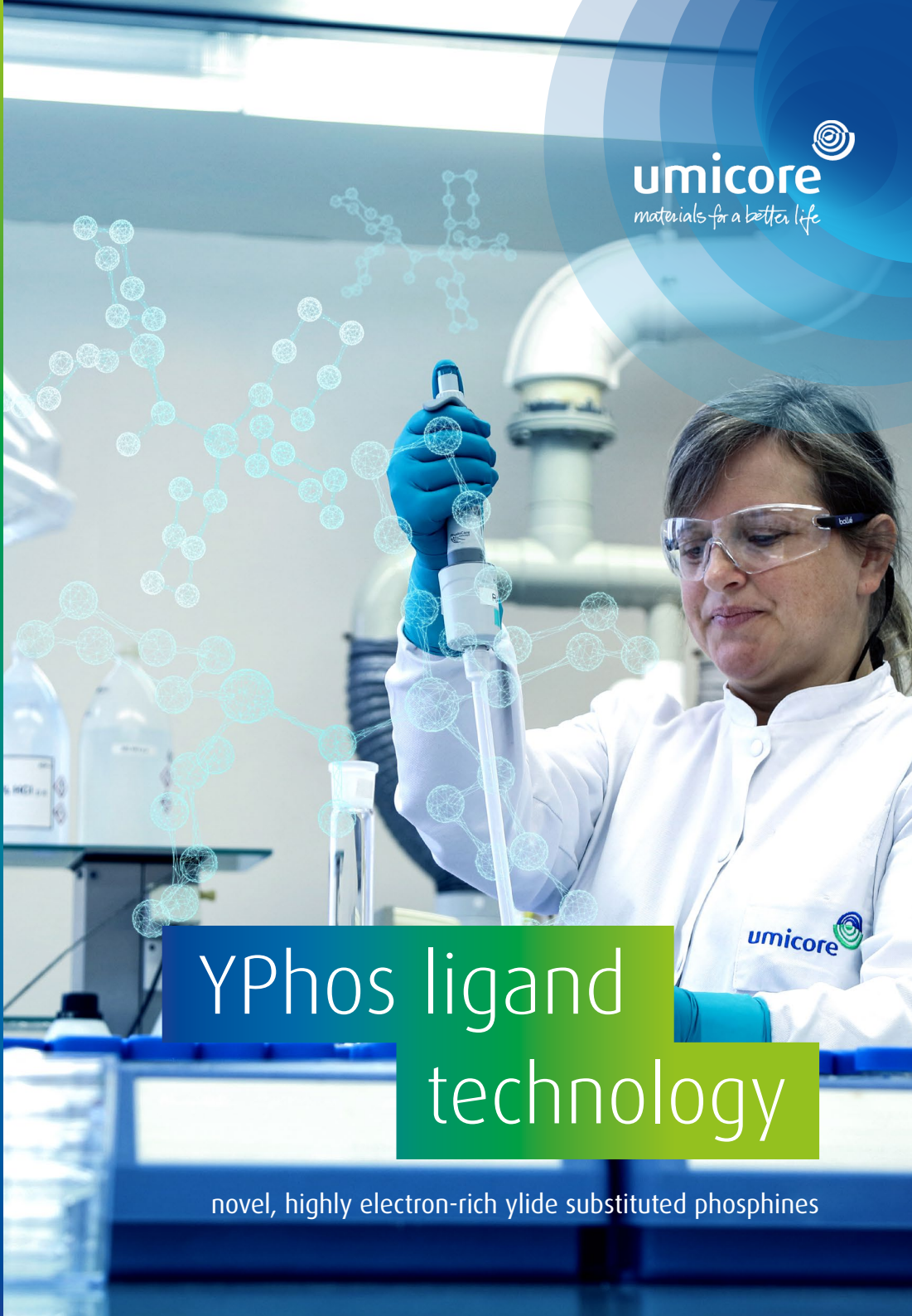


YPhos ligand technology

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.

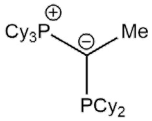
Key advantages:

- 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.

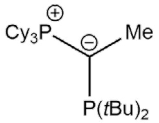
These advantages make YPhos ligands particularly useful for palladium-catalyzed coupling reactions. Additionally, they are suitable for a variety of applications, including the Buchwald-Hartwig amination and a-arylation of aliphatic cyclic ketones[1-4,7].

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

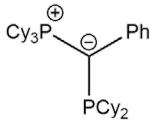
YPhos product portfolio



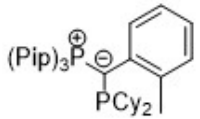
Trade name keYPhos
Empirical formula $PCy_3C(Me)PCy_2$
CAS no. 14185-94-5



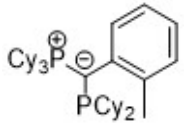
Trade name trYPhos
Empirical formula $PCy_3C(Me)PtBu_2$
CAS no. 2271302-83-9



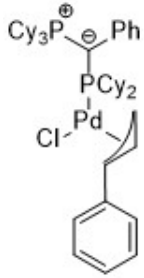
Trade name joYPhos
Empirical formula $PCy_3C(Ph)PCy_2$
CAS no. 2271302-85-1



Trade name piperYPhos
Empirical formula $PPip_3C(o\text{-}Tol)PCy_2$



Trade name pinkYPhos
Empirical formula $PCy_3C(o\text{-}Tol)PCy_2$
CAS no. 2495200-15-0



Trade name Umicore CX512
Empirical formula Pd(joYPhos)(cinnamyl)Cl
CAS no. 2412537-46-1

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