## Strem Chemicals, Inc.

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Catalog # 46-0241 Bis{[2-(Diadamantylphosphino)-3-methoxy-2',4',6'-tri-i-propyl-3'-(2,3,5,6-tetrafluoro-4-butylphenyl)-1,1'-biphenyl]palladium(0)}1,5-cyclooctadiene, [AlPhos Palladium complex]

## **Technical Notes:**

- 1. Ligand for the Palladium-Catalyzed Fluorination of Five-Membered Heteroaryl Bromides
- 2. Ligand for the Palladium-Catalyzed Fluorination of Aryl Triflates and Bromides

$$\begin{array}{c} & 2 \text{ eq AgF} \\ 0.5 \text{ eq KF} \\ \hline 2\% \text{ [(AlPhos-Pd)2(1,5-COD)]} \\ \hline Z = S, O, NR \\ X = N, CH \end{array}$$
 Tech. Note (1) Ref. (1)

$$R + \frac{X}{(AlPhos-Pd)_2(1,5-COD)]} \times \frac{[(AlPhos-Pd)_2(1,5-COD)]}{3 \text{ equiv CsF } (X=OTf)} \times \frac{\alpha}{\beta} \times \frac{F}{Ref. (2)}$$

$$X = Br, OTf \qquad 2 \text{ equiv AgF} + 0.5 \text{ equiv KF } (X=Br) \times \alpha : \beta > 100:1$$

## References:

- 1. Organometallics, 2015, 34, 4775
- 2. J. Am. Chem. Soc. 2015, 137, 13433