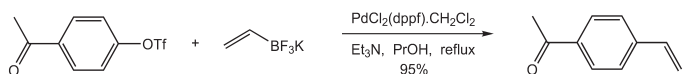


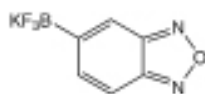
Organotrifluoroborates



Direct cross-coupling of potassium vinyltrifluoroborate (stock no. L17970) with aryl halides and triflates, catalyzed by [1,1'-Bis(diphenylphosphino)ferrocene]palladium(II) chloride (stock no. 41225).

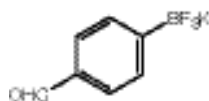
New synthetic methods are being explored to improve and expand on carbon-carbon coupling techniques. One of these employs organotrifluoroborates, which as reagents tolerant of air and moisture, allow the reactions to take place under relatively mild and non-toxic conditions. Organotrifluoroborates also allow the carbon-boron bond to remain intact through multiple steps, providing more flexibility as to when the cross-coupling reaction can take place. Potassium organotrifluoroborates feature a low molecular weight and a reliable stoichiometry. In addition to C-C coupling, potassium organotrifluoroborates are used in a variety of other reactions, such as 1,2- and 1,4-addition, C—O and C—N bond formation, and halogenation, and allylation.

Below is a listing of organotrifluoroborates available from Alfa Aesar's standard catalog offering. We are continuously adding new products.



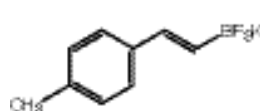
H28304

Potassium benzofurazan-5-trifluoroborate, 95%



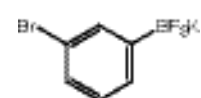
L17969

Potassium 4-formylphenyl-trifluoroborate, 97%
[374564-36-0]



L17973

Potassium 4-methyl-beta-styryl-trifluoroborate, 95%
[219718-86-2]



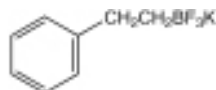
L17966

Potassium 3-bromophenyl-trifluoroborate, 97%
[374564-34-8]



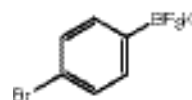
H28102

Potassium 5-formylthiophene-2-trifluoroborate, 97%
[1025113-78-3]



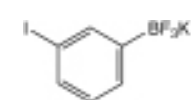
H25930

Potassium 2-phenylethyl-trifluoroborate, 98%
[329976-74-1]



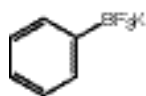
L17967

Potassium 4-bromophenyl-trifluoroborate, 97%
[374564-35-9]



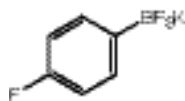
H29009

Potassium 3-iodophenyl-trifluoroborate, 96%



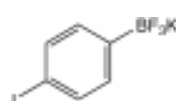
L17568

Potassium phenyl-trifluoroborate, 98%
[153766-81-5]



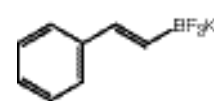
L17655

Potassium 4-fluorophenyl-trifluoroborate, 95%
[192863-35-7]



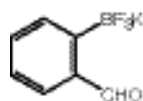
H28758

Potassium 4-iodophenyl-trifluoroborate, 96%
[912350-00-6]



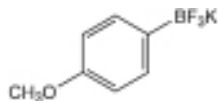
L17971

Potassium trans-beta-styryl-trifluoroborate, 98%
[201852-49-5]



L17968

Potassium 2-formylphenyl-trifluoroborate, 97%
[192863-39-1]



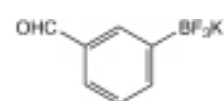
H27384

Potassium 4-methoxyphenyl-trifluoroborate, 95%
[192863-36-8]



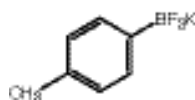
L17970

Potassium vinyltrifluoroborate, 97%
[13682-77-4]



H28125

Potassium 3-formylphenyl-trifluoroborate, 97%
[871231-44-6]



L17604

Potassium 4-methylphenyl-trifluoroborate, 98%
[216434-82-1]

Molander, Gary A.; Febo-Ayala, Wilma; Ortega-Guerra, Montserrat, 'Facile Synthesis of Highly Functionalized Ethyltrifluoroborates', *Journal of Organic Chemistry*, 2008, 73(15), 6000-6002.

Darses, Sylvain; Genet, Jean-Pierre, 'Potassium Organotrifluoroborates: New Perspectives in Organic Synthesis', *Chemical Reviews* (Washington, DC, United States), 2008, 108(1), 288-325.

Stefani, Helio A.; Cella, Rodrigo; Vieira, Adriano S., 'Recent Advances in Organotrifluoroborates chemistry', *Tetrahedron*, 2007, 63(18), 3623-3658.