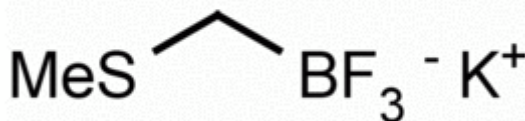


**Product Name: Potassium (thiomethyl)methyltrifluoroborate**

**Catalog Number: P10961**



**Sizes Available:** 1 g, 5 g, and larger sizes available

**Molecular weight:** 168.03 g/mol

**Molecular Formula:** C<sub>2</sub>H<sub>5</sub>BF<sub>3</sub>KS

**CAS Number:** 2144763-01-7

**Trifluoroborate Derivative Coupling Reactions**

1) [Modern synthetic methods for copper-mediated C\(aryl\)-O, C\(aryl\)-N, and C\(aryl\)-S bond formation](#), Ley, Steven V., Thomas, Andrew W., *Angewandte Chemie, International Edition* (2003), 42(44), 5400-5449.

2) [Suzuki-Miyaura cross-coupling reactions of alkylboronic acid derivatives or alkyltrifluoroborates with aryl, alkenyl or alkyl halides and triflates](#), Doucet, Henri, *European Journal of Organic Chemistry* (2008), (12), 2013-2030.  
DOI:10.1002/ejoc.200700984

3) [Palladium-catalyzed, direct boronic acid synthesis from aryl chlorides: a simplified route to diverse boronate ester derivatives](#), Molander, Gary A., Trice, Sarah L. J., Dreher, Spencer D., *J. A. C.S.* (2010), 132(50), 17701-17703.

- 4) [Scope of the Suzuki-Miyaura Cross-Coupling Reactions of Potassium Heteroaryltrifluoroborates](#), Molander, Gary A., Canturk, Belgin, Kennedy, Lauren E., J. of Organic Chemistry (2009), 74(3), 973-980.
- 5) [Enantioselective Organo-SOMO Catalysis: The  \$\alpha\$ -Vinylolation of Aldehydes](#), Kim, Hahn, MacMillan, David W. C., Journal of the American Chemical Society (2008), 130(2), 398-399. DOI:10.1021/ja077212h
- 6) [Visible-Light-Induced Chemoselective Deboronative Alkynylation under Biomolecule-Compatible Conditions](#), Huang, Hanchu, Zhang, Guojin, Gong, Li, Zhang, Shuaiyan, Chen, Yiyun, Journal of the American Chemical Society (2014), 136(6), 2280-2283. DOI:10.1021/ja413208y
- 7) [Stereospecific Cross-Coupling of Secondary Alkyl  \$\beta\$ -Trifluoroboratoamides](#), Sandrock, Deidre L., Jean-Gerard, Ludivine, Chen, Cheng-Yi, Dreher, Spencer D., Molander, Gary A., Journal of the American Chemical Society (2010), 132(48), 17108-17110. DOI:10.1021/ja108949w
- 8) [Aryl Trifluoroborates in Suzuki-Miyaura Coupling: The Roles of Endogenous Aryl Boronic Acid and Fluoride](#), Butters, Mike, Harvey, Jeremy N., Jover, Jesus, Lennox, Alastair J. J., Lloyd-Jones, Guy C., Murray, Paul M., Angewandte Chemie, International Edition (2010), 49(30), 5156-5160, S5156/1-S5156/68.
- 9) [Iridium-Catalyzed Enantioselective Allylic Vinylolation](#), Hamilton, James Y., Sarlah, David, Carreira, Erick M., Journal of the American Chemical Society (2013), 135(3), 994-997. DOI:10.1021/ja311422z
- 10) [Organocatalytic Vinyl and Friedel-Crafts Alkylations with Trifluoroborate Salts](#), Lee, Sandra, MacMillan, David W. C., Journal of the American Chemical Society (2007), 129(50), 15438-15439. DOI:10.1021/ja0767480

**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. **Potassium (thiomethyl)methyltrifluoroborate** is manufactured, shipped according to standard practices, and intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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