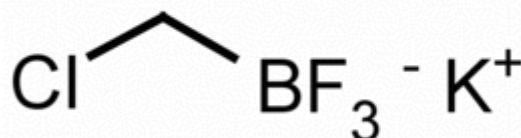


**Product Name: Potassium chloromethyltrifluoroborate**

**Catalog Number: P10691**



**Sizes Available:** 1 g, 5 g, 25 g, and larger sizes available

**Molecular weight:** 156.38 g/mol

**Molecular Formula:**  $\text{CH}_2\text{BClF}_3\text{K}$

**CAS Number:** 1279123-64-6

**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 chloromethyltrifluoroborate** 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.

**Warranty and Disclaimer:** Frontier Scientific, Inc. warrants the product conforms to the specifications stated herein. In the event of nonconformity, Frontier will replace products or refund purchase price, at its sole option, and Frontier shall not be responsible for any other loss or damage, whether known or foreseeable to Frontier. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Frontier assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.