

Identification

4-Formylphenyl boronic acid
 4-Borono-benzaldehyde
 4-Formylbenzene boronic acid
 CAS no. 87199-17-5
 BRN 3030770

Specifications

Assaymin. 99%

Properties

Crystalline solid
 Molecular weight149.9
 Melting point265 - 268°C

Safety & Handling

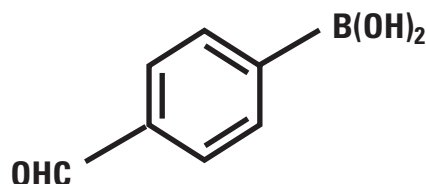
R 36/37/38
 S 26, 36
 TSCA

References

- Petasis et al., Tetrahedron Lett. 34 (1993), 583
- Petasis et al., Tetrahedron 53 (1997), 16463
- Petasis et al., J. Am. Chem. Soc. 120 (1998), 11798
- Reynolds et al., Chemtracts 14 (2001), 796
- Snyder et al., J. Am. Chem. Soc. 80 (1958), 835
- Kumar et al., J. Med. Chem. 46 (2003), 2813
- Sato et al., Heterocycles 61 (2003), 31
- Lewis et al., Org. Lett. 2 (2000), 589
- Sebastian et al., Tetrahedron 56 (2000), 34
- Myers et al., J. Am. Chem. Soc. 124 (2002), 12969
- Kobayashi et al., Eur. J. Org. Chem. 23 (2000), 3825
- Yu et al., Tetrahedron 57 (2001), 9285
- Fillipis et al., Synth. Commun. 32 (2002), 2669

C,C Coupling

4-Formylphenyl boronic acid (4-FPBA)

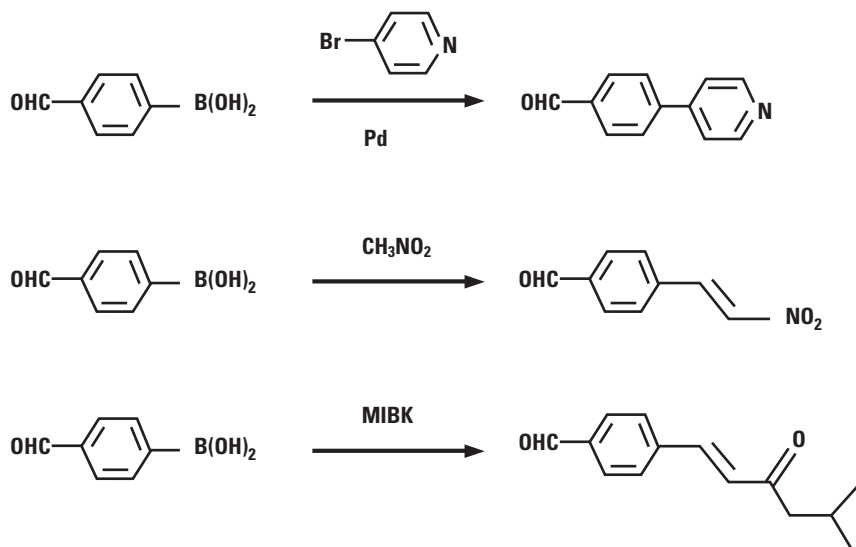


4-FPBA is typically used in Suzuki and Petasis couplings.

It is a very versatile boronic acid, since its formyl group can be conveniently modified to generate more complex boronic acids. For example, aldol and nitroaldol condensation, condensation with amines and pyridinium compounds, Friedel-Crafts alkylation, Pictet-Spengler reactions, Wittig type reactions, reductive amination with NaBH_3CN , permanganate oxidation and NaBH_4 reduction can all be performed with the formyl group under full retention of the boronic acid function.

Archimica manufactures 4-FPBA on commercial scale and has established a strong supply position due to superior technology. The other two isomers, 2-FPBA and 3-FPBA, and several heterocyclic formyl-substituted Arylboronic acids, are available via this technology as well.

Applications



For additional information and/or samples, please contact our regional sales office.

Regional contacts are given at www.archimica.com



Archimica's recommendations, notices or instructions as to handling, use, storage or disposal of any Product, including its use alone or in combination with other products, or as to any apparatus or process for the use of any Product, and based upon information believed to be reliable, but Archimica shall have no liability with respect to any such recommendations or instructions. Archimica's sole and exclusive warranty is that its products comply with Archimica's published chemical and physical specifications. Archimica makes no other warranties, either express or implied, with respect to its recommendations, instructions, products, apparatus, process or otherwise, and specifically disclaims any implied warranties of merchantability, suitability, fitness for a particular purpose or otherwise.
August 2006