

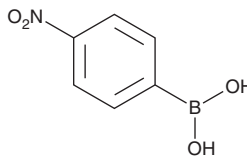
# PRODUCT INFORMATION



## 4-Nitrobenzeneboronic Acid

Item No. 30401

**CAS Registry No.:** 24067-17-2  
**Formal Name:** B-(4-nitrophenyl)-boronic acid  
**Synonyms:** 4-Nitrophenylboronic Acid,  
*p*-Nitrophenylboronic Acid,  
*p*-nitro-Benzeneboronic Acid  
**MF:** C<sub>6</sub>H<sub>6</sub>BNO<sub>4</sub>  
**FW:** 166.9  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 267 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

4-Nitrobenzeneboronic acid is supplied as a solid. A stock solution may be made by dissolving the 4-nitrobenzeneboronic acid in the solvent of choice, which should be purged with an inert gas. 4-Nitrobenzeneboronic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 4-nitrobenzeneboronic acid in these solvents is approximately 15 mg/ml.

4-Nitrobenzeneboronic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-nitrobenzeneboronic acid should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 4-Nitrobenzeneboronic acid has a solubility of approximately 0.16 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

4-Nitrobenzeneboronic acid is an arylboronic acid building block that has been used in the synthesis of phenols.<sup>1,2</sup>

### References

- Xu, J., Wang, X., Shao, C., *et al.* Highly efficient synthesis of phenols by copper-catalyzed oxidative hydroxylation of arylboronic acids at room temperature in water. *Org. Lett.* **12(9)**, 1964-1967 (2010).
- Sawant, S.D., Hudwekar, A.D., Kumar, K.A.A., *et al.* Ligand- and base-free synthesis of phenols by rapid oxidation of arylboronic acids using iron(III) oxide. *Tetrahedron Lett.* **55(4)**, 811-814 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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