

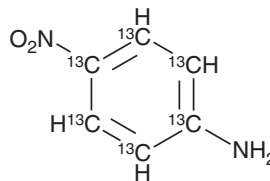
# PRODUCT INFORMATION



## $^{13}\text{C}_6$ -4-Nitroaniline

Item No. 34858

**CAS Registry No.:** 1028361-70-7  
**Formal Name:** 4-nitro-benzenamine-1,2,3,4,5,6- $^{13}\text{C}_6$   
**Synonym:**  $^{13}\text{C}_6$ -*p*-Nitroaniline  
**MF:** [ $^{13}\text{C}$ ] $_6\text{H}_6\text{N}_2\text{O}_2$   
**FW:** 144.1  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{\text{max}}$ : 229, 369 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ\text{C}$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

$^{13}\text{C}_6$ -4-Nitroaniline is supplied as a solid. A stock solution may be made by dissolving the  $^{13}\text{C}_6$ -4-nitroaniline in the solvent of choice, which should be purged with an inert gas.  $^{13}\text{C}_6$ -4-Nitroaniline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of  $^{13}\text{C}_6$ -4-nitroaniline in these solvents is approximately 30 mg/ml.

$^{13}\text{C}_6$ -4-Nitroaniline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers,  $^{13}\text{C}_6$ -4-nitroaniline should first be dissolved in DMSO and then diluted with the aqueous buffer of choice.  $^{13}\text{C}_6$ -4-Nitroaniline has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

$^{13}\text{C}_6$ -4-Nitroaniline is intended for use as an internal standard for the quantification of 4-nitroaniline by GC- or LC-MS. 4-Nitroaniline has been used in the synthesis of antimicrobials as well as colorimetric substrates used to quantify the activity of enzymes, including thrombin.<sup>1,2</sup>

### References

1. Patel, R.V., Patel, P.K., Kumari, P., *et al.* Synthesis of benzimidazolyl-1,3,4-oxadiazol-2ylthio-N-phenyl (benzothiazolyl) acetamides as antibacterial, antifungal and antituberculosis agents. *Eur. J. Med. Chem.* **53**, 41-51 (2012).
2. Aruell, L., Friberger, P., Karlsson, G., *et al.* A new sensitive and highly specific chromogenic peptide substrate for factor  $\text{X}_a$ . *Thromb. Res.* **11(5)**, 595-609 (1977).

#### 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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