

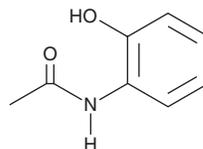
# PRODUCT INFORMATION



## N-acetyl-2-Aminophenol

Item No. 35829

**CAS Registry No.:** 614-80-2  
**Formal Name:** N-(2-hydroxyphenyl)-acetamide  
**Synonyms:** AAP, 2-Acetamidophenol, 2-Acetaminophenol, N-acetyl-o-Aminophenol, N-acetyl-ortho-Aminophenol, NSC 3989, Orthocetamol  
**MF:** C<sub>8</sub>H<sub>9</sub>NO<sub>2</sub>  
**FW:** 151.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 243 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Synthetic



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

### Laboratory Procedures

N-acetyl-2-Aminophenol is supplied as a solid. A stock solution may be made by dissolving the N-acetyl-2-aminophenol in the solvent of choice, which should be purged with an inert gas. N-acetyl-2-Aminophenol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-acetyl-2-aminophenol in DMSO is 11 mg/ml and 16 mg/ml in DMF. N-acetyl-2-Aminophenol is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-acetyl-2-aminophenol can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N-acetyl-2-aminophenol in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

N-acetyl-2-Aminophenol is a derivative of the analgesic and antipyretic acetaminophen (Item No. 10024) that has been found in *P. fluorescens*.<sup>1,2</sup> It inhibits platelet aggregation induced by ADP (Item Nos. 16778 | 21121) or arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in isolated human platelet-rich plasma when used at a concentration of 50 μM.<sup>1</sup> N-acetyl-2-Aminophenol (1 mg/kg) decreases disease severity and prevents increases in paw volume in a rat model of collagen-induced arthritis. It has been used as a synthetic intermediate in the synthesis of compounds with antimalarial activity.<sup>3</sup> N-acetyl-2-Aminophenol is also a potential impurity in commercial preparations of acetaminophen.<sup>4</sup>

### References

1. Qureshi, Z., Aslam, M., Saeed, T., et al. *Turk. J. Pharm. Sci.* **12**(3), 75-94 (2015).
2. Slininger, P.J., Burkhead, K.D., Schisler, D.A., et al. *Appl. Microbiol. Biotechnol.* **54**(3), 376-81 (2000).
3. Dziwornu, G.A., Coertzen, D., Leshabane, M., et al. *J. Med. Chem.* **64**(8), 5198-5215 (2021).
4. Arıkan, C.C., Kulabaş, N., and Küçükgül, I. *J. Pharm. Biomed. Anal.* **223**, 115123 (2023).

#### 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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