

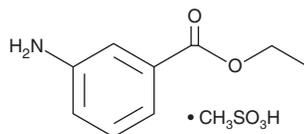
# PRODUCT INFORMATION



## Ethyl 3-Aminobenzoate (methanesulfonate)

Item No. 20660

**CAS Registry No.:** 886-86-2  
**Formal Name:** 3-amino-benzoic acid-ethyl ester, monomethanesulfonate  
**Synonyms:** Ethyl *m*-Aminobenzoate, MS-222, NSC 93790  
**MF:** C<sub>9</sub>H<sub>11</sub>NO<sub>2</sub> • CH<sub>4</sub>O<sub>3</sub>S  
**FW:** 261.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 222, 323 nm  
**Supplied as:** A crystalline solid  
**Storage:** Room temperature  
**Stability:** ≥4 years



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

### Laboratory Procedures

Ethyl 3-aminobenzoate (methanesulfonate) is supplied as a crystalline solid. A stock solution may be made by dissolving the ethyl 3-aminobenzoate (methanesulfonate) in the solvent of choice, which should be purged with an inert gas. Ethyl 3-aminobenzoate (methanesulfonate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ethyl 3-aminobenzoate (methanesulfonate) in ethanol is approximately 25 mg/ml and approximately 30 mg/ml in DMSO and DMF.

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 ethyl 3-aminobenzoate (methanesulfonate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ethyl 3-aminobenzoate (methanesulfonate) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Ethyl 3-aminobenzoate (methanesulfonate), a hydrophilic derivative of benzocaine (Item No. 20132), is an anesthetic used by hatcheries and in research studies to immobilize fish for marking, transport, or to suppress sensory systems during invasive procedures such as the implantation of electronic tags.<sup>1,2</sup>

### References

1. Carter, K.M., Woodley, C.M., and Brown, R.S. A review of tricaine methanesulfonate for anesthesia of fish. *Rev. Fish Biol. Fisheries* **21**(1), 51-59 (2011).
2. Ramlochansingh, C., Branoner, F., Chagnaud, B.P., *et al.* Efficacy of tricaine methanesulfonate (MS-222) as an anesthetic agent for blocking sensory-motor responses in *Xenopus laevis* tadpoles. *PLoS One* **9**(7), e101606 (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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/07/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM