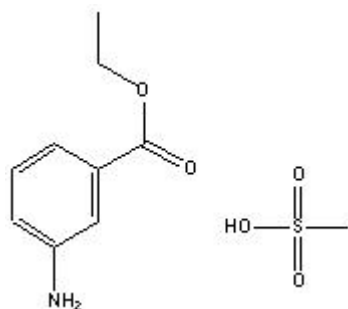


TECHNICAL INFORMATION

Catalog Number: 103106

Ethyl-m-Aminobenzoate, Methanesulfonate Salt

Structure:



Molecular Formula: C₉H₁₁NO₂·CH₄O₃S

Molecular Weight: 261.3

CAS #: 886-86-2

Synonyms: Tricaine methanesulfonate salt; 3-Aminobenzoic acid ethyl ester methanesulfonate salt; Fiquel; Metacain; Metacaine; Tricaine mesylate

Physical Description: White powder

Solubility: Soluble in water (1 g/ml). Aqueous solutions are stable to boiling.¹ Anesthetic solutions should be made immediately prior to use, since they degrade upon standing.

Note: Keep away from sunlight. Sunlight will cause degradation.⁴

Description: A derivative of an isomer of benzocaine.⁵ Mainly used as an anesthetic in fish, sharks, frogs, toads, salamanders, newts and worms.^{1,4} Concentrations generally used in fish are 25 to 300 mg/l water, with larger fish requiring higher concentrations.⁴ *Bufo marinus* frogs require approximately 1000 mg/l, while *Rana pipens*, *R. temporaria* and *Xenopus leavis* require approximately 300 mg/l for adequate anesthesia.⁶ Pharmacology discussed by Jolly, et al.⁴

References:

- Merck Index, **12th Ed.**, No. 9751
- Billeter, et al., *U.S. pat.* 1,678,317, issued to Sandoz (1928).
- *Ger. pat.* 454,698 (1927).
- Jolly, D.W., et al., *Vet. Rec.*, **v. 91**, 424 (1972).
- Reynolds, J.E.F., *Martindale, The Extra Pharmacopeia*, 30th Ed., p. 1018, The Pharmaceutical Press: London (1993).
- Smith, D.G., *Am. J. Physiol.*, **v. 226:2**, 367 (1974).