PRODUCT INFORMATION



Fusaric Acid

Item No. 17876

CAS Registry No.: 536-69-6

Formal Name: 5-butyl-2-pyridinecarboxylic acid

Synonyms: 5-Butylpicolinic Acid,

5-Butylpyridine-2-Carboxylic Acid,

NSC 135043

MF: $C_{10}H_{13}NO_{2}$ FW: 179.2 **Purity:** ≥98%

UV/Vis.: λ_{max} : 229,269 nm A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

Fusaric acid is supplied as a crystalline solid. A stock solution may be made by dissolving the fusaric acid in the solvent of choice, which should be purged with an inert gas. Fusaric acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of fusaric acid in these solvents is approximately 30 mg/ml.

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 fusaric acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of fusaric acid in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fusaric acid is a picolinic acid derivative first isolated from fungi of the genus Fusarium.¹ It is transformed to an N-methylamide derivative by many plant species infected by the mold.² Both fusaric acid and fusaric acid methylamide are thought to contribute to the toxicoses developed from ingesting mold-infested feeds.^{2,3} Fusaric acid can also synergize the toxicity of trichothecenes in certain assays.³

References

- 1. Hidaka, H., Nagatsu, T., and Takeya, K. Fusaric acid, a hypotensive agent produced by fungi. J. Antibiot. (Tokyo) 22(5), 228-230 (1969).
- 2. Berthiller, F., Crews, C., Dall'Asta, C., et al. Masked mycotoxins: A review. Mol. Nutr. Food Res. 57(1), 165-186 (2013).
- 3. Smith, T.K. Recent advances in the understanding of Fusarium trichothecene mycotoxicoses. J. Anim. Sci. 70(12), 3989-3993 (1992).

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

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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