PRODUCT INFORMATION



Aminoethoxyvinyl Glycine (hydrochloride)

Item No. 15546

CAS Registry No.: 55720-26-8

Formal Name: (2S,3E)-2-amino-4-(2-aminoethoxy)-3-

butenoic acid, monohydrochloride

Synonyms: ABG 3168, AVG, Aviglycine

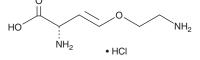
MF: $C_6H_{12}N_2O_3 \bullet HCI$

FW: 196.6 ≥95% **Purity:**

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 vears

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



Laboratory Procedures

Aminoethoxyvinyl glycine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the aminoethoxyvinyl glycine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Aminoethoxyvinyl glycine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of aminoethoxyvinyl glycine (hydrochloride) in these solvents is approximately 2, 1, and 0.5 mg/ml, respectively.

Description

Aminoethoxyvinyl glycine (AVG) is an ethylene biosynthesis inhibitor and a plant growth regulator. 1 It inhibits ethylene production in, and elongation of, maize root tips when used at a concentration of 1 μM. AVG also inhibits cystathionine β -lyase and cystathionine γ -lyase (K_i s = 1.1 and 10.5 μ M, respectively).² It delays color change from green to red and maintains fruit firmness, markers of fruit ripening, in postharvest tomatoes when used at a concentration of 1 mM.3 Formulations containing aminoethoxyvinyl glycine have been used as plant growth regulators in agriculture.

References

- 1. Alarcón, M.V., Lloret-Salamanca, A., Lloret, P.G., et al. Effects of antagonists and inhibitors of ethylene biosynthesis on maize root elongation. Plant Signal. Behav. 4(12), 1154-1156 (2009).
- 2. Steegborn, C., Clausen, T., Sondermann, P., et al. Kinetics and inhibition of recombinant human cystathionine y-lyase. Toward the rational control of transsulfuration. J. Biol. Chem. 274(18), 12675-12684 (1999).
- 3. Liu, Z., Hu, T., Yu, C., et al. Design of aminoethoxyvinylglycine functional analogues to delay postharvest ripening of tomato fruit. Postharvest. Biol. Technol. 195, (2023).

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.

WARRANTY AND LIMITATION OF REMEDY

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, 07/28/2023

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