

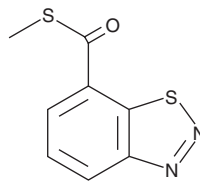
PRODUCT INFORMATION



Acibenzolar-S-methyl

Item No. 24212

CAS Registry No.: 135158-54-2
Formal Name: 1,2,3-benzothiadiazole-7-carbothioic acid, S-methyl ester
Synonyms: CGA 245704, Benzothiadiazole
MF: C₈H₆N₂OS₂
FW: 210.3
Purity: ≥98%
UV/Vis.: λ_{max}: 254, 291, 326 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Acibenzolar-S-methyl is supplied as a solid. A stock solution may be made by dissolving the acibenzolar-S-methyl in the solvent of choice, which should be purged with an inert gas. Acibenzolar-S-methyl is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 1 mg/ml mg/ml. Acibenzolar-S-methyl is slightly soluble in ethanol.

Acibenzolar-S-methyl is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, acibenzolar-S-methyl should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Acibenzolar-S-methyl has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Acibenzolar-S-methyl is a fungicide that induces systemic acquired resistance (SAR) in a variety of plants leading to infection resistance.¹ It induces resistance in wheat concomitant with expression of wheat chemically-induced (WCI) genes when applied at 30 g per hectare.² Acibenzolar-S-methyl (0.4 g/L) is protective against *V. inaequalis* in apple trees when used in combination with light integrated pest management (IPM) and increases fruit yield in comparison to the IPM-only group.¹ Formulations containing acibenzolar-S-methyl have been used in the control fungi in industrial, commercial, and residential areas.

References

1. Marolleau, B., Gaucher, M., Heintz, C., *et al.* When a plant resistance inducer leaves the lab for the field: Integrating ASM into routine apple protection practices. *Front. Plant Sci.* **8:1938**, (2017).
2. Görlach, J., Volrath, S., Knauf-Beiter, G., *et al.* Benzothiadiazole, a novel class of inducers of systemic acquired resistance, activates gene expression and disease resistance in wheat. *Plant Cell* **8(4)**, 629-643 (1996).

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, 07/25/2023

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