



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

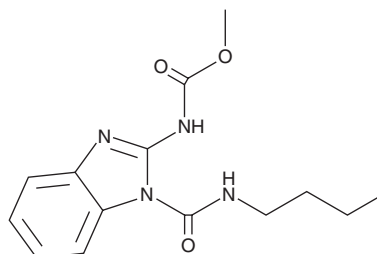
PRODUCT INFORMATION



Benomyl

Item No. 34634

CAS Registry No.: 17804-35-2
Formal Name: N-[1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-carbamic acid, methyl ester
Synonym: NSC 263489
MF: C₁₄H₁₈N₄O₃
FW: 290.3
Purity: ≥95%
UV/Vis.: λ_{max}: 221, 286, 293 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

Benomyl is supplied as a solid. A stock solution may be made by dissolving the benomyl in the solvent of choice, which should be purged with an inert gas. Benomyl is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of benomyl in these solvents is approximately 5 and 30 mg/ml, respectively. Benomyl is also slightly soluble in ethanol.

Benomyl is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, benomyl should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Benomyl has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Benomyl is a carbamate pesticide.¹ It inhibits mycelial growth of the plant pathogenic fungus *A. rabiei* on potato dextrose agar (EC₅₀ = 2.19 µg/ml). Benomyl (1 mg/ml in the drinking water) decreases the fecundity of red ant (*M. rubra*) queens.² It induces the production of reactive oxygen species (ROS), apoptosis, and DNA damage in H9c2 rat cardiomyocytes.³

References

- Demirci, F., Bayraktar, H., Babalioğlu, I., et al. *In vitro* and *in vivo* effects of some fungicides against the chickpea blight pathogen, *Ascochyta rabiei*. *J. Phytopathology* **151**(9), 519-524 (2003).
- Pech, P. and Heneberg, P. Benomyl treatment decreases fecundity of ant queens. *J. Invertebr. Pathol.* **130**, 61-63 (2015).
- Mehtap, K., Ezgi, Ö., Tugce, B., et al. Benomyl induced oxidative stress related DNA damage and apoptosis in H9c2 cardiomyoblast cells. *Toxicol. In Vitro* **75**, 105180 (2021).

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