



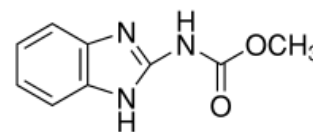
Product Information Sheet

C1888 Carbendazim

Synonyms: BCM, Methyl 2-benzimidazolecarbamate, Methyl benzimidazol-2-ylcarbamate
CAS: 10605-21-7
Formula: C₉H₉N₃O₂
Mol. Weight: 191.19

Properties

Form: Powder
Appearance: White to Off-White
Solubility: Solubility per the Merck Index in water is 8 mg/mL at pH 7, 29 mg/mL at pH 4. It is also soluble in HCl and Acetic Acid
Application: Plant Tissue Culture Antimycotics
Storage Temp: 2 to 6 °C
Stock Solution Storage Temp: 2 to 6 °C
Typical Working Concentration: N/A
Other Notes: Plant Tissue Culture Tested



Application Notes

Carbendazim is a broad-spectrum systemic antimycotic. Its mode of action is to inhibit the formation of mitotic microtubules in of fungi.¹ In a study, 10 ppm minimum inhibitory concentration of carbendazim is most effective toward of *Fusarium mangiferae*, a fungus that affects mango plants.² Carbendazim has also been reported to have cytokinin-like activity effect in plant tissue cultures, e.g., *Asparagus*, *Cordyline* and *Prunus*.³

Please Note: It is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References

1. Garcia, Pablo C., Rosa M. Rivero, Juan M. Ruiz, and Luid Romero. 2003. The Role of Fungicides in the Physiology of Higher Plants: Implications for Defense Responses. *The Botanical Review*. 69(2):167-172.
2. Iqbal, Zafar, M.A. Pervez, S. Ahmad, Y. Iftikhar, M. Yasin, A. Nawaz, M. Ghazanfar, A. A. Dasti, and A. Saleem. 2010. Determination of minimum inhibitory concentrations of fungicides against fungus *Fusarium mangiferae*. *Pakistan Journal Botany*. 42(5). pp. 3525-3532.
3. Debergh, P.C., G. De Coster, and W. Steurbaut. 1993. Carbendazim as an Alternative Plant Growth Regulator in Tissue Culture Systems. *In Vitro Cellular & Developmental Biology Plant*. Vol. 29P. No. 2(April) pp. 89-91.
4. *Merck Index*. 13th Ed. #1799

PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442

Web Site: www.phytotechlab.com

© 2012 PhytoTechnology Laboratories®