

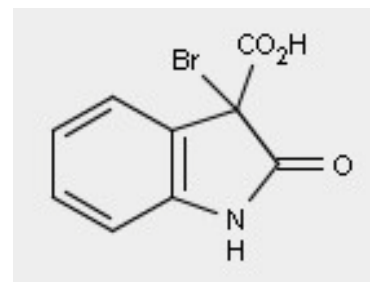


## Product Information Sheet

**A147**

**Auxindole™**

Synonym: 3-Methyleneoxindole; 3-Bromooxindole-3-acetic Acid  
CAS: N/A  
Formula: C<sub>10</sub>H<sub>8</sub>BrNO<sub>3</sub>  
Molecular Wt: 269.9



### Properties

Form: Powder  
Appearance: Yellow to Pale Green Powder  
Application: Auxin  
Solubility: EtOH  
Typical Working Concentration: Auxindole™ is a relatively new product and has been tested with few species in few applications. Initial results indicate that concentrations of not more than 0.01 µM are optimum for Stage II growth, and concentrations of 0.1-10 µM are optimum for Stage III. Concentrations exceeding 0.01 mM are inhibitory. MO is sensitive to pH extremes. The biological activity of MO is best demonstrated between pH 5.7 and 6.8.  
Storage Temp: -20 to 0 °C  
Storage Temp of Stock Solution: 3-methyleneoxindole (MO) solutions prepared in agar can be refrigerated for at least one month with full retention of auxin activity. MO polymerizes readily at concentrations of 1 mM or higher; stock solutions should be diluted as soon as possible. For longer storage, store at -20 to 0 °C.  
Other Notes: Plant Tissue Culture Tested; For Research Use Only

### Application Notes

Auxindole™ is the trade name of 3-bromooxindole-3-acetic acid. In aqueous solutions Auxindole™ is instantaneously and quantitatively converted to 3-methyleneoxindole [(MO); (FW = 145)]. Because MO is a potent sulfhydryl reagent it forms adducts with sulfhydryl (-SH) compounds and sulfur-containing nucleophiles; therefore, such compounds should not be used as solvents or buffer components. The use of dimethyl sulfoxide (DMSO) as solvent is particularly discouraged.

#### *Preparation of 1 mM stock solution (10 mL) and subsequent serial dilution*

1. Weigh 2.7 mg of Auxindole™ and place in a test tube.
2. Dissolve with 0.2 mL of 95% ethanol and immediately dilute with 9.8 mL distilled water or suitable buffer. At this stage Auxindole™ is completely converted to MO.
3. Serially dilute stock solution to desired concentration. Ten-fold serial dilutions are most convenient to prepare.
4. For use in micropropagation, MO can be serially diluted in liquefied agar medium and autoclaved at 121°C for 20 minutes without loss of auxin activity or structural integrity. Alternatively, stock solutions of MO can be sterilized by filtration before serial dilution.

Please Note: While PhytoTechnology Laboratories™ tests each lot of this product with two or more plant cell/ tissue culture lines, 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

Auxindole™ is a trademark of Ceres Scientific Products, a division of Natural Science Inc. who provided this information.

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