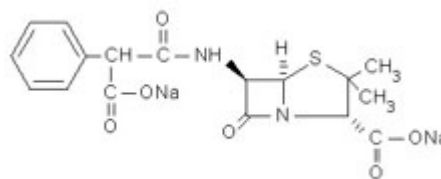


Carbenicillin Solution 250 mg/mL



Synonym: α -Carboxybenzylpenicillin, Disodium Salt
CAS: 4800-94-6
Formula: $C_{17}H_{16}N_2O_6SNa_2$
Molecular Wt: 422.41

Properties

Form: Liquid
Appearance: Clear, Colorless liquid
Application: Plant Tissue Culture Antibiotic
Solubility: Miscible with Water
Typical Working Concentration: N/A
Storage Temp: 2 to 6° C
Other Notes: Plant Tissue Culture Tested

Application Notes

Carbenicillin is a relative of penicillin with mode of action similar to benzylpenicillin. It is the most commonly used antibiotic for the elimination of *Agrobacterium*, but is sensitive to β -Lactamase. It has a relatively low toxicity to a wide range of plant species. A concentration of 500 μ g/mL is recommended to achieve microbe toxicity; however, concentration of up to 500 mg/L has been reportedly used in plant tissue culture. Furthermore, a carbenicillin concentration should not exceed 1000 μ g/mL in order to avoid toxicity for plants (though plant toxicity may be higher or lower than 1000 μ g/mL for different plant species).

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

Merck 13, 1801
Sweetman SC (ed), *Martindale: The Complete Drug Reference* 35. China: Pharmaceutical Press, 2007.
Flowers and Vaillancourt, 2005. *Agrobacterium tumefaciens*-mediated transformation of *Colletotrichum graminicola* and *Colletotrichum sublineolum*. *Current Genetics* 48: 380-388.