



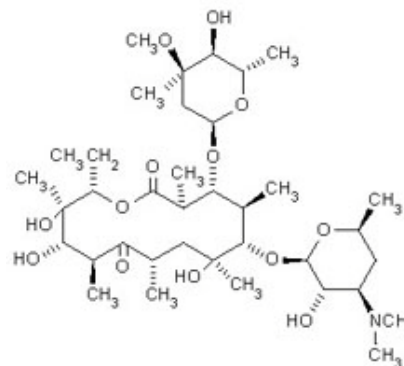
Product Information Sheet

E344 Erythromycin

Synonyms: Erythromycin A
CAS: 114-07-8
Formula: C₃₇H₆₇NO₁₃
Mol. Weight: 733.92

Properties

Form: Powder
Appearance: White to Off-white Powder
Application: Plant Tissue Culture Antibiotic
PhytoTechnology Laboratories® tests solubility at 10 mg/mL in ethanol. Per the Merck Index, erythromycin is soluble in water at 2 mg/mL
Storage Temp: Room Temperature
Other Notes: This product is slightly hygroscopic.



Application Notes

Erythromycin is a broad-spectrum macrolide antibiotic produced by a strain of *Streptomyces erythreus*. Its mode of action is to inhibit protein synthesis by binding to the 50S ribosome subunit and blocking its transpeptidation.² Erythromycin is effective against most Gram-positive cocci and bacilli and some Gram-negative bacteria;³ however, its activity is enhanced in alkaline condition at approximate pH 8.5 for Gram-negative bacteria.²

It has been reported that the minimum inhibitory concentration of erythromycin for *Staphylococci epidermidis* is 8 to greater than 32 µg/mL and *Staphylococci aureus* is 0.12 to greater than 128 µg/mL.³

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

1. Merck 13, 3714
2. Martindale: The Complete Drug Reference, 35th ed., Paul S. Blake, Ed. (Royal Pharmaceutical Society, 2007), p. 240.
3. Sultana, Najma, M. Saeed Arayne and Rizwana Sabri. 2005. Erythromycin synergism with essential and trace elements. *Pakistan Journal of Pharmaceutical Sciences*. Vol. 18, No. 2. Pp 35-39.

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