Erythromycin

Product Number E6376
Store at Room Temperature

**Product Description**
Molecular Formula: C_{37}H_{67}NO_{13}
Molecular Weight: 733.9
CAS Number: 114-07-8
pK_{a}: 8.8
Extinction Coefficient: E_{M}^{\infty} = 50 (280 nm, pH 6.3)\(^1\)

This is an antimicrobial substance produced by the growth of certain strains of *Streptomyces erythreus*. It is a mixture consisting largely of erythromycin A with lesser amounts of erythromycins B and C.\(^1,2\)

Erythromycin acts as an inhibitor of elongation at the transpeptidation step.

A suggested concentration for use is 100 mg/L. Depending upon the strain of bacteria, erythromycin has been used between 50 and 200 mg/L to control bacterial growth. It is stable in solution at 37 °C for 3 days.

**Precautions and Disclaimer**
For Laboratory Use Only. Not for drug, household or other uses.

**Preparation Instructions**
The product is soluble in water (2 mg/ml). A 0.067% solution in water has a pH of 8.0-10.5. This product is soluble in ethanol (50 mg/ml), yielding a clear, colorless to faint yellow solution. It is freely soluble in alcohol, acetone, chloroform, acetonitrile, and ethyl acetate. It readily forms salts with acids. Solutions should be protected from light.

**References**
1. The Merck Index, 11th ed., Entry# 3627.
3. USP, 23, p. 1693.

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