Erythromycin A enol ether

**Item No. 17191**

**CAS Registry No.:** 33396-29-1  
**Formal Name:** 8,9-didehydro-9-deoxo-6-deoxy-6,9-epoxy-erythromycin  
**Synonyms:** BRL 46357ER, EM-201  
**MF:** C_{37}H_{65}NO_{12}  
**FW:** 715.9  
**Purity:** ≥95%  
**UV/Vis.:** λ_{max}^* 209 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Erythromycin A enol ether is supplied as a crystalline solid. A stock solution may be made by dissolving the erythromycin A enol ether in the solvent of choice, which should be purged with an inert gas. Erythromycin A enol ether is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of erythromycin A enol ether in ethanol is approximately 30 mg/ml and approximately 15 mg/ml in DMSO and DMF.

Erythromycin A enol ether is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, erythromycin A enol ether should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Erythromycin A enol ether has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Erythromycin A enol ether is a decomposition product of the macrolide antibiotic, erythromycin A (Item No. 16486).\(^1\) Erythromycin A enol ether does not retain the antibiotic properties of erythromycin A and has been identified as a β-turn mimic of the peptide hormone motilin, causing duodenal contractions and gastrointestinal distress.\(^2\) This compound has been used to determine the binding characteristics of ligands of the motilin receptor.\(^2\)

### References