

Product Name:	Pipemidic acid
Product Number:	P009
CAS Number:	51940-44-4
Molecular Formula:	C ₁₄ H ₁₇ N ₅ O ₃
Molecular Weight:	303.32 g/mol
Form:	Powder
Appearance:	Yellowish-white, odorless, bitter-tasting crystals
Solubility:	Acids and Bases: Soluble Alcohols: Very slightly soluble Water: Very slightly soluble
Source:	Synthetic
Melting Point:	251-255 °C
Storage Conditions:	2-8 °C, protect from light
Description:	Pipemidic acid is a pyridopyrimidine antibiotic similar in structure and mechanism to quinolone antibiotics. Pipemidic acid is slightly soluble in aqueous solution.
Mechanism of Action:	Pipemidic acid targets bacterial DNA gyrase, an enzyme which reduces DNA strain during replication. Because DNA gyrase is required during DNA replication, subsequent DNA synthesis and ultimately cell division is inhibited.
Spectrum:	Pipemidic acid is a broad spectrum antibiotic covering a wide range of susceptible bacteria.
Microbiology Applications	<p>Pipemidic acid is commonly used in clinical <i>in vitro</i> microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against gram positive and gram negative microbial isolates. Medical microbiologists use AST results to recommend antibiotic treatment options for infected patients. Representative MIC values include:</p> <ul style="list-style-type: none">• <i>Escherichia coli</i> 1.56 µg/mL• <i>Staphylococcus aureus</i> 6.25 µg/mL• For a complete list of pipemidic acid MIC values, click here.
References:	Katae, Hiromi, and Akira Minami. "Pipemidic Acid, a New Antibacterial Agent Active Against Pseudomonas Aeruginosa: In Vitro Properties." <i>Antimicrobial Agents and Chemotherapy</i> 8.32 (1975): 132-38. www.ncbi.gov . 24 Mar. 1975. Web. 21 Aug. 2012.

